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ABSTRACT

As a preface to indepth feasibility studies of the concept, this source book characterizes three basic categories of year-round plans; lists the arguments, advantages, and disadvantages of the three general plans; provides a brief description of North Carolina experimental programs; reports sample research findings that explore cost considerations for North Carolina; and presents an instrument to evaluate North Carolina's readiness for a year-round school. For purposes of this presentation, the variety of plans being followed by school systems for rescheduling the school year have been classified into (1) the traditional summer school plan; (2) the rotating plan (utilizing school facilities year-round, but not providing additional days of education); and (3) the extended term plan (utilizing school facilities year-round and providing more days of education.) The document concludes with a 50-page review summary of current readings on the year-round school. (Author/DN)

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THE YEAR-ROUND SCHOOL

A SOURCE BOOK

AND

REVIEW OF THE LITERATURE

April, 1973

Prepared by the Research & Development Area
North Carolina Department of Public Instruction
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PREFACE

Progress in education is most likely to take place when concepts worthy of debate are freely and intelligently discussed.

The year-round school, one of the most sensitive topics in the entire educational arena, needs new and fresh consideration, in view of all we know about children and young people, what we know of the learning process itself, and the rapidity with which we are forced to face change in all its manifestations.

The State Department of Public Instruction, constantly seeking better ways to improve the educational experiences of youth, hopes that this nondefinitive source book will stimulate further study and deliberation on the part of school personnel and lay citizens alike.

A. Craig Phillips

A. Craig Phillips
State Superintendent of
Public Instruction

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THE YEAR-ROUND SCHOOL

Introduction

A Growing Concept

The concept is growing that education should be a year-round activity, yet there are relatively few who contend that educational experiences should be alike throughout the year. The extended school term, whether the year-round school or not, provides opportunities for variations in learning activities -- variations in type and in depth. When the primary focus of the extended term is on improvement of educational opportunities for students, there are few who quarrel with the general idea.

At the same time, and from the purely pragmatic point of view, pressure continues to mount for fuller and more extensive use of school plants, school equipment, and trained personnel. Interest in this concept and pressure for its implementation seem to occur in cycles which correspond to increasing pupil population demanding increased capital outlays.

There are those, however, who feel that the additional cost necessary for the operation of the year-round school precludes its creation as well as its continuing support. The evidence available makes it clear that even though year-round use of facilities may lessen certain expenses temporarily, a program of continuous education for all the youth in a community, in most instances, will be more expensive than current programs. Tax-conscious citizens and those who oppose the year-round concept ideologically feel that the educational benefits resulting from such a system could not possibly offset its impracticability.

In spite of the sensitive, controversial nature of this topic, and in spite of all the criticism against the year-round school, it is likely that many school administrative units in North Carolina will move toward some form of the extended school term within the next few years as one viable approach toward improving educational experiences for the youth of the State. It is likely, also, that this approach, when implemented, will afford additional opportunities for the schools more nearly to account for their educational responsibilities for holding students and preparing them to live full lives as well as to make a living. It is interesting to note that a Gallup Poll in 1970 (50 percent) revealed 18 percent fewer citizens opposed to the year-round school than was the case in a similar poll in 1967 (68 percent).

Already, and on a number of occasions, educators, business leaders, and a broad spectrum of parents in North Carolina have explored this concept; and at present four experimental projects involving the year-round school, each funded with Federal and State resources, are in operation under the supervision of the Division of Development: two pilot schools in Buncombe County; a summer enrichment program in Craven County; New Hanover County, students 10-12; the John W. Moore Laboratory School, Winston-Salem/Forsyth.

Early Beginnings

Operation of schools on a year-round basis is in itself not at all new, since this was tried as early as 1904 in Bluffton, Indiana. This particular experiment and the few which followed had limited success, primarily because of the lack of computer technology to aid in the complicated

and necessary scheduling process, because of the impracticality of plans themselves, and because of limited research evidence on which to build such programs. Moreover, the public, strongly wedded to the agrarian school year, seemed apathetic and unconvinced that the year-round approach to improved educational advantages had real merit. Educators, for the most part, espoused the same philosophy.

In the sixties, however, the year-round concept began to procure momentum as the need for space and facilities became crucial, and as the computer began to assume more and more technical administrative tasks. Today, the movement as well as acceptance of year-round schools isn't as restricted; more than 30 school districts are either operating full year-round school programs or select pilot programs. Moreover, the number of other school districts that are studying year-round education programs, with the idea of installing them soon, is uncountable.

Popularity of Summer Sessions

The extension of the school year to include one or more summer sessions has met with more approval among parents and educators than has the year-round concept. This is not difficult to understand, since operational procedures for the satisfaction of these needs entailed limited public expenditures and few frustrations for the school administrative units which were affected. These summer sessions almost invariably have centered on make-up work, remedial opportunities, studies permitting acceleration, and those providing enrichment -- the latter being more and more popular in recent years. Though the quality of these programs have varied in North Carolina and the Nation, it is generally felt that many of them have been altogether worthwhile. On

the other hand, it is known that a number of these programs have been lacking in imagination, variety, and maximum usefulness. Too often they were merely tacked on and not regarded in terms of the total organic structure of the ongoing educational program.

Planning for the State's Future

As school administrative units in North Carolina reevaluate the "long-vacation" school, or as the State's central government considers this tradition, it should be remembered that no single plan for extending the school year will meet the needs of every community. As a result, the year-round school, or whatever modification seems most feasible, should be allowed to evolve in many indigenous forms. This innate flexibility will enable each community to initiate and plan in terms of local needs, desires, and resources, and other possibilities peculiar to the local unit.

As ways are sought to improve education through possible modification of the school calendar, attention should be given many factors, such as modern theories of education, including up-to-date information on how learning best takes place; the kind of knowledge and skills required for life in modern society; the ever-changing character of youth and society; the nature of change itself and how best to bring about change; personally meaningful approaches to instruction; and a new emphasis on evaluation as part of the learning process. Unless a modified school calendar provides opportunities for serious consideration of such areas as these, there is little reason for altering traditional calendars.

It should be remembered that no year-round plan will be free from

operational defects and emotional difficulties from the outset, no matter how intelligent and comprehensive the preplanning. Cooperative refinements in concept and in operational and administrative procedures will be necessary on a continuing basis if the year-round school is to serve its intended purposes.

Variety in Existing Programs

Existing year-round programs enjoy considerable variety; yet most of these were designed in an effort to alleviate overcrowded situations or to improve educational opportunities.

Certainly an idea that carries with it the potential for improving education, as well as the promise of more efficient use of facilities and staff, deserves open-minded consideration and careful study. This source book is not intended as a final analysis of the suitability of the year-round school to North Carolina's needs and aspirations; rather, it proposes to act as a preface to in-depth feasibility studies on this concept. Therefore, the purposes of this source book are:

- To characterize three basic categories of year-round plans
- To list arguments, advantages, and disadvantages of the three general plans
- To provide brief descriptions of North Carolina experimental programs
- To report sample research findings which explore cost considerations for North Carolina
- To present an instrument to evaluate North Carolina's readiness for a year-round school
- To include a review of related literature.

TYPES OF YEAR-ROUND PROGRAMS

Although there are school systems experimenting with a number of plans for rescheduling the school year, these plans can be conveniently classified into three categories: (1) the traditional summer school plan; (2) the rotating plan which utilizes school facilities year-round but does not provide more days of education; and (3) the extended term plan which utilizes school facilities year-round in order to provide more days of education.

Traditional Summer School Plan

Summer school programs are generally operated for five purposes: make-up, recreation, enrichment, acceleration, and remediation. The make-up programs offer students an opportunity to pass courses which were failed during the regular school year. These courses are usually concentrated or abbreviated versions of courses offered in the full term. Summer recreational programs, usually consisting of individual and group sports, music, art, and crafts are offered to provide wholesome recreation and encourage wise use of leisure time. Summer enrichment programs offer students an opportunity to take courses which they could not schedule during the regular term or which were not a part of the normal school curriculum. Some summer programs provide opportunities which allow students to take courses that deliberately accelerate them through elementary and secondary school. Acceleration programs, which are attended voluntarily, usually would allow a student to graduate from high school one year before his peers who did not participate in the accelerated program. Remedial courses are offered to students who lack the basic skills or foundation to proceed through subsequent grades or courses.

Summer school programs generally serve a small percentage of the students enrolled in the regular school term. They are usually operated between six

and eight weeks and are financed by the school districts, student fees, or both. In most summer programs attendance is voluntary, though some administrators advocate compulsory attendance for students who have failed a grade, course, or who need remedial work. Summer programs are operated to derive educational benefits rather than for economical and efficiency reasons.

Advantages

1. Attendance is usually voluntary. The program does not interfere with summer vacations, jobs, and self-directed recreational and educational activities.
2. The program does not interfere with plant and bus maintenance activities.
3. Summer programs do not require extensive changes in curriculum and school organizations.
4. The program requires a limited professional staff, thus allowing teachers the option of extended employment.
5. Students have the opportunity to participate in recreational, remedial, enrichment activities.
6. The cost of summer programs is relatively low.

Disadvantages

1. Traditional summer school programs cannot accommodate a large number of students.
2. They usually cater to select groups.
3. Summer school programs often compete with church and recreational and other programs.
4. Summer school programs do not fully utilize school buildings and facilities.

Rotating Plan

Under a rotating plan, each student attends school approximately the same amount of time he attended under the traditional nine-month program, but the

school is operated throughout the entire calendar year. This is accomplished by staggering vacation times so that at any given time a large percentage (i.e. 25 percent) of the student enrollment is on vacation.

Scheduling and enrollment variations under the rotating plan are unlimited. Two of the most popular rotating plans are the staggered quarter plan and the 45-15 quarter plan. The former encompasses a 48-week (240 days) school year which is divided into terms of approximately 12 weeks each. Each student attends three consecutive quarters (180 days) and vacations the fourth. Therefore, under this plan, each student attends school the same amount of time he would attend under a traditional nine-month school year arrangement, but the school is open throughout the entire year. The operation of this plan is illustrated in Figure 1.

FIGURE 1. OPERATION OF THE ROTATING FOUR-QUARTER PLAN FOR RESCHEDULING THE SCHOOL YEAR

Pupil attendance group*	Attendance Quarters			
	Fall	Winter	Spring	Summer
Group A	Vacation	School	School	School
Group B	School	Vacation	School	School
Group C	School	School	Vacation	School
Group D	School	School	School	Vacation

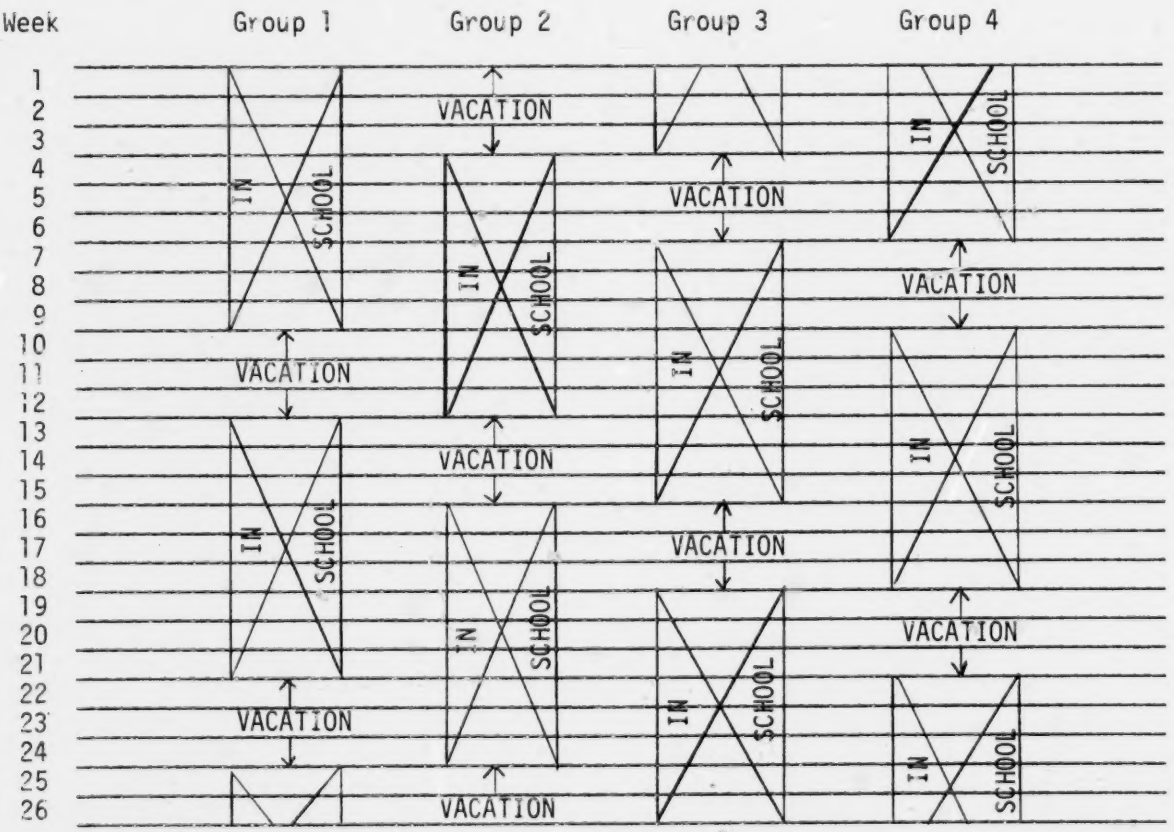
*Each group comprises one-fourth of the entire student enrollment.

In the past, the staggered quarter plan has involved students and teachers in several scheduling variations. For example, one variation limits student

attandance to three quarters while requiring teachers to work all four quarters. A second alternative makes the four-quarters mandatory for teachers but optional to students, while a third variation makes the fourth optional for both students and teachers.

The 45-15 quarter plan, to date generally used at the elementary school level, requires that each student attend school for 45 days (9 weeks) and then have 15 days vacation. Students are required to attend school for only 180 days, though options for additional days may be provided for students and/or teachers. In addition to four fifteen-day vacations, Christmas, Easter and regular holiday vacation periods are provided in the year's schedule. The schedule that students follow under the 45-15 staggered quarter plan is presented in Figure 2.

FIGURE 2. THE 45-15 STAGGERED QUARTER PLAN
A Partial View of 26 Weeks



The 45-15 plan has two unique advantages over the staggered four-quarter plan. First, instead of a concentrated three-month vacation in one of four seasons, student vacations are dispersed throughout the year, every 45 school days. This vacation plan is more palatable to parents, since they are better able to adjust family vacations to coincide with one of the four, three-week vacation periods. Since children from the same family and neighborhood are on identical schedules, school transportation and vacation planning are facilitated. The second advantage of this type of schedule is related to the lag in formal learning that takes place during the normal three-month summer vacation; it is not necessary for teachers to spend as much time on review work when students return to school.

Advantages

1. The school plants and other equipment would be used 12 months of the year rather than for nine months.
2. Fewer school buildings would be required, thus eliminating cost for construction, debt service, and insurance premiums.
3. Fewer school buses would be required.
4. Teachers and other school personnel would be provided the opportunity to work for a full year, thus raising teacher status and income and stabilizing teaching staffs.
5. The need for double sessions would be eliminated in over-crowded school systems.
6. Fewer teachers would be needed if a number of the teachers worked the full year.
7. Fewer instructional materials, library books, and equipment would be needed at one time.
8. Summer recreation services could extend their programs to year-round operation.
9. Flexibility would be provided in allowing students to accelerate or repeat subject matter.
10. Family vacations would not be limited to one season.

11. More students should be able to find vacation employment, since only one-fourth of the students would be on vacation at any one time.

12. Many large industries would prefer that employees vacation throughout the year rather than during a concentrated three-month period.

Disadvantages

1. In many sections of the country, air-conditioning would have to be installed.

2. Maintenance problems would be complicated. Weekend and night-time maintenance require overtime pay and continuous use of the facilities could require their replacement and repair more often.

3. Additional burden would be placed on administrators and supervisors who have to handle quarterly enrollments, scheduling, and graduating exercises.

4. Maintenance of school buses would become more difficult when they are in year-round use.

5. Community agencies which provide special programs for children during the summer would have to adjust their schedules.

6. The pattern of taking family vacations during the summer months would be disrupted for many.

7. The pressures of year-round employment could affect teachers' mental and physical health.

8. The planning and coordination of seasonal extra-curricular activities, especially sports, would be more difficult.

9. If North Carolina moves to year-round education, teacher-training institutions would have to change schedules and programs in order to provide graduate and in-service training.

10. Before a rotating plan could become self-sustaining, a portion of the students would either have to attend school continuously for more than 180 days or attend less than 180 days.

11. Minimum school enrollment at any one time is often too small to insure uniform class size. A school system with a small enrollment would have more difficulty in attaining optimum efficiency.

Extended School Year Plan

An extended school year plan is designed to use existing school facilities to provide students with more than the 180 days offered in a traditional school program. Generally, the school years in these programs range from 204 to 225

days. In contrast to the rotating plans, extended school year plans are initiated more to accomplish education goals than economic ones.

There are a number of variations of the extended school year program. For example, the Multiple Trails Plan combines an extended school term with multiple modules in which students meet less often for varying lengths of time. Both the trimester and quadrimester involve a longer school year while dividing the school year into three and four periods respectively.

Most of the extended term school year plans provide an opportunity for a student to save one or more years in grades K-12. In the Continuous School Plan, for example, a student may gain one year in eight years when schools are operated 203 days per year; one year in seven years in a 210-day school year; and one year in six years in a 216-day school year. The manner in which a year is gained in seven years for a 210-day school year is presented in Figure 3.

FIGURE 3. THE CONTINUOUS SCHOOL YEAR PLAN
K-6, 210-Day School Year

Year or Learning Level	Curriculum Adjustment*	
Level 1	Kindergarten -- 180 days	Grade 1 -- 30 days
Level 2	Grade 1 -- 150 days	Grade 2 -- 60 days
Level 3	Grade 2 -- 120 days	Grade 3 -- 90 days
Level 4	Grade 3 -- 90 days	Grade 4 -- 120 days
Level 5	Grade 4 -- 60 days	Grade 5 -- 150 days
Level 6	Grade 5 -- 30 days	Grade 6 -- 180 days

*Curriculum Adjustment -- to save one year in seven.

Advantages

1. Pupils would have more time in the formative years to master skills and concepts required for later success.
2. Pupils would have more educational experiences before they reach the legal dropout age.
3. Pupils would gain one or more years in schooling in 13 years. (K-12)
4. Pupils would be able to enter college or job market at an earlier age.
5. Students usually would have fewer teacher changes.
6. Continuous progress and acceleration would be allowed.

Disadvantages

1. Curriculum would have to be reorganized.
2. The extended term would be more expensive.
3. The length of summer vacations would be reduced.

EXPERIMENTAL YEAR-ROUND SCHOOL PROGRAMS IN NORTH CAROLINA

Currently, the Division of Development of the State Department of Public Instruction is sponsoring year-round school experimental projects with Federal and State funds in four local school systems in North Carolina. Since the programs have not been in existence long enough for comprehensive evaluations, only a brief description of these experimental projects is presented in this report.

Buncombe County

Two pilot schools in this system are offering a full calendar of educational opportunities as a four-quarter plan. The fourth quarter is optional, but any course offered during the preceding three quarters is available if there is sufficient demand for it. Although some courses dictate sequential study,

strenuous effort is being made to design courses which allow students a variety of options, not only in the initial selection of courses, but also when they will take the courses.

For information contact: Julia Capps, Project Director
Fred Martin, Superintendent
Buncombe County Schools
P. O. Box 7557
Asheville, North Carolina 28807

Craven County

This project focuses on a summer enrichment program as a forerunner to a future year-round school. The enrichment program utilizes individualized instruction and differentiated staffing techniques to maximize high school students' success in continued education and/or subsequent gainful employment.

For information contact: Ruth Hoyle, Coordinator
Hiram Mayo, Superintendent
Craven County Schools
P. O. Box 969
New Bern, North Carolina 28560

New Hanover County

Using flexible scheduling, individualized instruction, on-the-job training, and open classroom concepts, an open campus, year-round school program has been implemented in this school system. Students in grades 10-12 are involved in this program which is aimed at promoting academic achievement, reinforcing positive attitudes toward school, and reducing dropout rates.

For information contact: Carter Newsome, Coordinator
Heyward Bellamy, Superintendent
New Hanover County Schools
P. O. Box 390
Wilmington, North Carolina 28401

Winston-Salem/Forsyth

The John W. Moore Laboratory School is experimenting with many innovations for its 600 elementary students, one being a 45-15 attendance schedule plan. In this plan, the students do not rotate; the entire student body attends for 45 days and then all are on vacation for three weeks.

For information contact: Robert Severs, Project Director
Marvin Ward, Superintendent
Winston-Salem/Forsyth Schools
P. O. Box 2513
Winston-Salem, North Carolina 27102

CONSTRAINTS AND SUPPORTS RELATED TO IMPLEMENTATION OF THE YEAR-ROUND SCHOOL IN NORTH CAROLINA

Literature is replete with descriptions of various alternative plans for year-round school programs and the advantages and disadvantages of each of the plans. Most of the literature, however, is written about year-round schools that have been relatively successful. There is little information on the programs that have failed except for an acknowledgement that there have been more unsuccessful programs than successful ones. According to the available literature, most school districts that have adopted a year-round schedule have done so primarily to improve the instructional program rather than to realize economic gains. There are few research or evaluation studies which provide valid analyses of the costs or savings which are associated with a year-round program. Nor do they generally possess the characteristics of report writing upon which one can make valid judgments.

The purpose of this section of the source book is to consider the practical constraints and/or supports to establishing a year-round plan in North Carolina as compared to the continuation of the nine-month school plan under which our schools now operate. Many factors must be considered before a valid decision can be made relative to the adoption of a year-round plan. Among those to be considered are: curriculum modification, scheduling, staffing, transportation, effect on seasonal farm labor in rural areas, legal considerations, economic considerations, and public acceptance. The remainder of this paper will be devoted to an analysis of the effects of these factors on the adoption of a year-round school program in North Carolina.

Curriculum Modification

To achieve advantages which possibly could result from any year-round program would require restructuring of the traditional nine-month curriculum, particularly at the secondary level. Currently, curriculums are designed for two-semester programs in the high schools, with similar variation in the junior high schools. Most year-round school plans suggest modular scheduling of autonomous units for each quarter except where the inherent nature of the subject area is such that sequence is necessary. Possible advantages which would accrue from non-sequential courses are abandonment of the Carnegie Unit, program acceleration for some students, and ease of student transferral in and out of a school district.

Perhaps one of the greatest advantages of this unit approach lies in its potential for vocational education programs. It would provide for the following:[1]

- Time between work and school can be shifted.
- Short-term concentrated courses can be adapted to preparation for a single skill which then can be used "on the job."
- The potential for movement in and out of school enhances the opportunities for this segment of our population to continue an educational program which is meaningful to them.
- An initial course can be offered to all students in a particular vocational area, such as machine shop. A student then could pursue two or more quarters in this area if he is interested; otherwise, he can seek another area.
- Vocational subjects can be broken down easily to fit the four-quarter plan.
- Intensive training for students would permit them to graduate with a salable skill.

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[1]Northville Public Schools, Northville, Michigan. Year Round School: Phase II - Is it Feasible? Published for the State of Michigan, Department of Education.

- Holding power of a school would be increased.
- Less teacher time would be needed as students move into a job.

The elementary schools are presently on a continuous nine-months curriculum. Implementation of any of the plans mentioned in this paper would require that the curriculum be reorganized or revised. There are two possible directions the elementary curriculum could go. One direction would be to conduct the traditional program with the student population divided into four groups, with students attending three of the four group sessions. Teachers would be assigned to specific groups and children would not necessarily be with the same teacher all year.

The second direction would provide an opportunity for schools to move toward individualized instruction which would require extensive curriculum reorganization. Each child would continuously progress at his own rate. To achieve this, curriculum materials would be broken down into small modules.

Scheduling

The year-round plan presents a much more complex scheduling problem than does the traditional nine-month plan. When one considers the problem of keeping families, and perhaps communities, on the same schedule, along with required racial balance, and the traditional scheduling problems, a computerized scheduling system would have to be implemented in each LEA. At the present, there is no way of estimating the cost for the additional computer facilities and/or computer time and programming services needed to accomplish this.

In the small rural attendance areas of North Carolina, a year-round program would create a much more severe problem than we now have in providing

a comprehensive educational program. Small schools are now struggling to maintain class enrollments large enough to justify teaching a variety of vocational and/or other enrichment (elective) courses. A year-round program would reduce their enrollment by 25%, making it even more difficult to maintain a quality education program. Therefore, it would appear that the year-round school could be justified only in areas of dense school population.

Staffing Considerations

An advantage to teachers of the year-round school plan is the potential for full-year employment. This would be a major step toward focusing attention on teaching as a profession equally as prestigious as any other. It is also possible that 12 months' employment would attract more men teachers, and hold outstanding teachers who might be considering other fields of work. No teacher would be forced to teach the entire year, however, and the administration would have the flexibility to hire teachers for three, six, nine, or twelve months.

Policies pertaining to salary increments, released time, vacations, and sick leave would have to be adopted. Answers can be found, but the problem lies in finding answers that are fair to both employer and employee. Both groups would, therefore, need to be deeply involved in the negotiations pertaining to policy.

One argument presented against the year-round school is that teachers would not be able to attend summer school. Current statistics, however, show that more teachers attend short-term workshops and evening educational programs than summer school. The flexibility allowed by the year-round

plans would permit teachers to attend school or travel at times other than the hot summer months.

On a per pupil basis, fewer teacher positions would be necessary each semester, but over the extended year, the number of teacher hours and money allocated to salaries would be no different from that of the traditional system.

Transportation Considerations

Since school bus depreciation is generally figured on the basis of age, rather than mileage, bus depreciation schedules would probably not be changed appreciably by transporting sutdents the year-round. Maintenance costs and earnings of the bus drivers would increase, however, by approximately one-third, since bus operation would extend at least 60 days beyond the traditional 180.

Theoretically, the same student population could be transported with 25 percent fewer buses; in practice, this might not be advisable. A study by the Division of Transportation for the school year 1972-1973 revealed that an average of 42,000 students "stand" daily on North Carolina school buses. (The State Board of Education, under authority granted by statute permits the bus seating capacity to be exceeded by 25 percent.) The reduction in daily school attendance as a result of a year-round program could eliminate these "standees" if the present fleet of buses is maintained. Assuming the continuation of present loading policies, however, the year-round school concept would mean that 25 percent fewer buses would initially be purchased. This would reduce the number of buses in operation from 10,430 to 7,823. Fewer buses would mean fewer drivers as well as a reduced maintenance crew.

Another possible consideration is that of using the same number of buses, but smaller ones. An initial cost saving would be realized, but the over-crowding situation would persist.

In addition to the difficulty one encounters in determining economic variations, he is confronted with the busing issue. It is possible that court-ordered busing would negate all attempts to schedule students for the year-round school by neighborhood. In this event, it seems reasonable to assume that busing costs would be increased, especially since North Carolina has numerous sparsely settled regions. An attempt to achieve racial integration by busing would necessitate mileage which would not accrue if students could be scheduled by neighborhood.

Need for Seasonal Labor

In the rural areas of North Carolina, especially in the tobacco-producing counties, there is still a very high demand for seasonal labor during the summer months. A large proportion of the supply of this seasonal labor is made up of school children who are out for summer vacation. According to the N. C. Agricultural Statistics, published by the N. C. Department of Agriculture, an average of 350,000 farm workers are needed each month during June, July and August. Approximately 62% of this need is met by family labor, and a large part of the remaining percentage is made up of school-age children living in these communities. The year-round school would eliminate 75% of the available school-age labor force, a situation which would place a real hardship on many farm families.

Legal Considerations

The General Statutes of North Carolina as they relate to public school laws do not currently allow sufficient flexibility for the State Board of Education to legally mandate the operation of schools on a year-round basis. (See Appendix A.) Deputy Attorney General Andrew A. Vanore, Jr., has stated, "I do not think that the State Board could presently require local school administrative units to so operate. Furthermore the great bulk of our system of State financing of public schools is geared to nine months of operation rather than twelve." (See Appendix B.)

New legislation would be required to clarify problems arising from the school calendar and the State aid formula before the North Carolina Schools could operate year-round. In addition, administrative reinterpretation would be required for such staffing aspects as teachers' pensions, retirement funds, and salary increments. Policy agreements and program details would need to be worked out first; subsequently, the legislative bills would be written to cover any needed changes.

Economic Consideration

One of the major constraints to the implementation of the year-round school is the adaptation of school plants for summer programs. Without adequate air conditioning, the operation of a summer instructional program is not feasible. In consultation with the Division of School Planning, some estimates of what it would cost to air condition the necessary facilities have been projected. These estimates are based on information available in ten LEAs with which the Division of School Planning worked during the 1972-1973 school year. These units were Macon County, Statesville City,

Rockingham County, Dare County, Caldwell County, Fayetteville City, Washington County, Carteret County, Goldsboro City and Reidsville City Schools. Since the units appeared to be somewhat randomly scattered about the State, they were used as a sample base for the statewide projection. If this assumption is correct, the following projected estimates should be fairly accurate:

- It was estimated that only 15% of existing public school space is mechanically cooled.
- It was determined that 84% of a given plant should be cooled for summer use.
- The prorated space per student in North Carolina was estimated to be 83 sq. ft.
- The estimated quantity of air conditioning is approximately one ton per 250 sq. ft.
- Installation cost for air conditioning is approximately $600 per ton.
- North Carolina's Average Daily Membership (ADM) in the third quarter of 1972-73 in grades 1 - 12 was 1,147,613.

Based on the above estimates, it will cost $142 per child or a cost of $163,000,000 to air condition existing facilities.

To make air conditioning operate efficiently and effectively in most existing buildings and to conserve energy, as well as reduce operating costs, certain other building features in many instances would need modification. Included in these would be additional insulation, the closing of large glass areas and/or provision of venetian blinds to reduce solar heat gain, and the provision of dropped ceilings in some old buildings to reduce volume. Moreover, professional fees and unusual electrical and/or structural changes which would be encountered in some buildings would require additional costs over the $600 per ton estimate. These extra requirements incidental

to air conditioning are very difficult to estimate since they vary widely from school to school. They could easily increase the cost from 25% to 100% depending upon conditions at each school. It was estimated these modifications would cost an additional $44,000,000 to $88,000,000. Thus, the total cost of air conditioning would range from $209,000,000 to $253,000,000, depending on the degree of modification needed. If space for the Statewide Kindergarten Program is air conditioned, it will cost another $13,000,000.

A comparison of initial capital outlay can be made when the additional cost of air conditioning for year-round programs is contrasted with the cost of new construction for the traditional nine-month program. This comparison was projected in an Inventory of Needs conducted by the Division of School Planning in January, 1973.

- Including the Kindergarten Program, the cost of air conditioning for the year-round program would be approximately $242,000,000.
- Cost of construction to continue the nine-month school plan would be approximately $681,913,000.

It appears that the cost of air conditioning will cost 35.4% of the cost of new construction for the nine-month program.

According to the 1971 North Carolina Public School Survey there would be 55,193 classrooms available for use at the end of the 1971-72 school year. Assuming the same space would accomodate a 25% higher enrollment in a year-round school plan, there would be an equivalent of 13,798 classrooms available to meet current needs. According to the January 1, 1973, Inventory of Needs, 12,436 new or renovated instructional spaces are needed to provide regular classrooms, kindergarten classrooms and library/media centers. Therefore, the classroom space released on a year-round plan

would more than cover the immediate classroom space projected for the traditional nine-month program. This comparison, however, does not include the projected needs for lunchrooms and gymnasiums; but, it could be assumed that going to a year-round program would drastically reduce the need for these facilities also.

In interpreting this information, certain cautions are advised. (1) It is a false assumption to think that the released space gained by a year-round program is available in the attendance areas where additional space is required. Many small schools which now have excess space will have even more available, whereas the very rapidly growing metropolitan areas may still have space shortages. (2) The cost of new construction projected in the January 1, 1973, Inventory of Needs included $53.5 million for renovation of existing facilities. It may be assumed that a majority of the renovation was required regardless of the schedule the system would follow. However, it must be kept in mind that costs for renovation are less than one-half the cost of additions and new site construction. (3) If new sites were not being considered for constructing new schools, more renovation of existing space probably would be required for use in year-round programs.

Public Acceptance

Tradition resists change. Parents and students are programmed to a September-June school year, and a summer vacation pattern. Obviously, a year-round program would meet with opposition until parents were fully aware of the advantageous implications. A concentrated communications campaign would need to be staged with all elements of a school community

involved: parents, students, teachers, other taxpayers, and educational administration. The approval of all these people would be essential to the success of a year-round school.

Acceptance would be facilitated if communities could be kept intact, and therefore, any program planning should address itself to this problem. To keep the family unit intact, all children from one family would need to be attending school at the same time.

Some year-round plans would, of course, be more acceptable than others. For example, it is unlikely that any community would be happy about having all children out of school from December through February and in school from June through August. Not only would parents be made unhappy by such a schedule, but many students as well; the star quarterback who is scheduled for vacation the fall term, the basketball player who is not enrolled during the winter term, and the baseball pitcher who is not enrolled during the spring session---all are adversely affected by such scheduling. These examples, nevertheless, point out the need to resolve academic and extra-curricular conflicts; otherwise, a community would accept the concept only by force.

This section of the source book is not intended as conclusive information for any separate school unit in North Carolina. As these facts present only a sampling of research results, each local unit must initiate and implement its individual, thorough study of factors related to a year-round school plan. The purpose of the remaining sections of this guide is to facilitate the local school system in determining whether or not it should pursue these tasks of initiation and implementation of a year-round school.

FACTORS INFLUENCING THE DEVELOPMENT OF YEAR-ROUND SCHOOL PROGRAMS FOR NORTH CAROLINA

At this time there are relatively few school districts in the Nation that have implemented year-round programs or are experimenting with the concept on a pilot basis. Efforts in North Carolina, for example, are limited to four experimental programs which are being funded with Federal and State development funds. Though all these efforts provide followers with invaluable insight and direction, it is also true that additional research is necessary for determining the success and failures associated with various factors and approaches. This is especially true in regard to the cost element for there continues to be conflicting reports concerning the economic benefits and liabilities for various year-round programs. Nevertheless, early appraisals warrant one conclusion: if a year-round program is considered, each school district will have to tailor a program to suit its own unique needs.

Obviously, a school board that is considering embarking on a year-round school program should conduct a thorough needs study using appropriate criteria. An instrument that may be used for that purpose follows. Prior to completing the instrument, it is imperative that reliable information be collected and analyzed in order that valid ratings may be assigned to the criteria items.

Information that should be collected includes:

- Enrollment projections and available classrooms
- Needs assessment of special instructional programs
- Public attitude in regard to full utilization of buildings and equipment

- The degree of acceptance of the year-round school program by students, parents, professional educators, teacher training college personnel, and personnel of youth-serving organizations
- The extent that facilities are adequate
- The extent that personnel can be trained to administer various year-round programs
- The extent that funds are available to operate various year-round school plans
- The extent to which policies, laws, and regulations permit the operation of various year-round school programs.

HOW ABOUT US?
A CHECKLIST TO DETERMINE READINESS FOR A YEAR-ROUND PROGRAM

Directions: On the basis of the data collected, circle a numerical value to each of the criteria items in this checklist. After completing the scale, summarize scores in the Summary Scoring Table according to the instructions after each item and at the end of the instrument. Please read all criteria items before beginning these ratings.

Example:

CRITERION ITEM

RATINGS

Receptive ←→ Reluctant

1. The P.T.A. supports the year-round school concept. 5 (4) 3 2 1

(Record circled score in Summer School, Rotating Program, and Extended Term Columns in Summary Scoring Table at the end of this scale.)

NEED CRITERION

RATINGS

Critical Need ←→ Little Need

1. Current or future enrollments and facility status indicate need for significantly more classrooms. 5 4 3 2 1

(Record circled score in Rotating Program Column in Summary Scoring Table at the end of this checklist.)

Important: If this criterion item has received a five rating, the school district must obviously choose either to construct more classrooms, schedule students on double shifts, or embark on some type of rotating year-round school plan. Other criteria items in the scale may help determine readiness for the latter alternative, the year-round school plan.

2. Special programs (remedial, acceleration, etc.) are needed for selected groups of students. Critical Need ←→ Little Need 5 4 3 2 1

(Record circled score in Summer School Column in Summary Table.)

3. Special programs (remedial, acceleration, etc.) are needed for a majority of students. Critical Need ←→ Little Need 5 4 3 2 1

(Record circled score in Extended Term Column in Summary Table.)

NEED CRITERION (Continued)

RATINGS

4. There is a need to use the schools more than the 180 days/nine-months term.

Critical Need ⟷ Little Need

5 4 3 2 1

(Record circled score in Summer School, Rotating Program, and Extended Term Columns in Summary Table.)

5. A major objective of the school is to provide more instruction during the formative years or before students reach the drop-out age.

Critical Need ⟷ Little Need

5 4 3 2 1

(Record circled score in Extended Term Column in Summary Table.)

ACCEPTANCE CRITERION

RATINGS

6. Students seem willing to try a year-round school program.

Receptive ⟷ Reluctant

5 4 3 2 1

(Record circled score in Rotating Program and Extended Term Columns in Summary Table.)

7. Parents are willing to adjust vacations and other family activities to coincide with new school schedules.

Receptive ⟷ Peluctant

5 4 3 2 1

(Record circled score in Rotating Program and Extended Term Columns in Summary Table.)

8. Local businessmen and other potential employees are willing to provide part-time jobs to students on a year-round basis.

Peceptive ⟷ Reluctant

5 4 3 2 1

(Record circled score in Rotating Program Column in Summary Table.)

9. Teacher-training institutions are willing to adjust training programs to coincide with teachers' new work schedules.

Receptive ⟷ Reluctant

5 4 3 2 1

(Record circled score, Rotating Program and Extended Term Columns in Summary Table.)

ACCEPTANCE CRITERION (Continued)

RATINGS

10. Teachers are willing to change traditional summer vacation periods.

Receptive ⟷ Reluctant

5 4 3 2 1

(Record circled score in Rotating Program and Extended Term Columns in Summary Table.)

11. Teachers and other professional workers are willing to work more than 180 days a year.

Receptive ⟷ Reluctant

5 4 3 2 1

(Record circled score in Rotating Program and Extended Term Columns in Summary Table.)

12. Maintenance personnel are willing to adjust work schedule to coincide with new school schedule.

Receptive ⟷ Reluctant

5 4 3 2 1

(Record circled score in Rotating Program and Extended Term Columns in Summary Table.)

13. Recreational departments and other youth-serving organizations are willing to reschedule activities to coincide with school schedule.

Receptive ⟷ Reluctant

5 4 3 2 1

(Record circled score in Rotating Program and Extended Term Columns in Summary Table.)

14. Top educational management and policy makers at State and local level are willing to make commitment to year-round programs.

Receptive ⟷ Reluctant

5 4 3 2 1

(Record circled score in Summer School, Rotating Program, and Extended Term Columns in Summary Table.)

ADMINISTRATIVE CRITERION

RATINGS

15. Conditions are such or can be corrected to insure proper temperature control in buildings year-round.

Adequate ⟷ Not Adequate

5 4 3 2 1

(Record circled score in Summer School, Rotating Program, and Extended Term Columns in Summary Table.)

ADMINISTRATIVE CRITERION (Continued)

RATINGS

16. Personnel are trained or can be trained for operating a year-round school.

Adequate ⟷ Not Adequate

5 4 3 2 1

(Record circled score in Rotating Program and Extended Term Columns in Summary Table.)

17. Funds and personnel are available to provide adequate maintenance for buildings, transportation, and equipment on year-round schedule.

Adequate ⟷ Not Adequate

5 4 3 2 1

(Record circled score in Rotating Program and Extended Term Columns in Summary Table.)

18. Personnel have the planning competencies necessary to design year-round school program.

Adequate ⟷ Not Adequate

5 4 3 2 1

(Record circled score in Rotating Program and Extended Term Columns in Summary Table.)

19. Sufficient and reliable information is available for making wise decisions about year-round school program.

Adequate ⟷ Not Adequate

5 4 3 2 1

(Record circled score in Rotating Program and Extended Term Columns in Summary Table.)

20. Professional and clerical personnel are available to handle quarterly enrollments, scheduling, and graduating exercises.

Adequate ⟷ Not Adequate

5 4 3 2 1

(Record circled score in Rotating Program Column in Summary Table.)

21. Transportation and food services can be provided.

Adequate ⟷ Not Adequate

5 4 3 2 1

(Record circled score in Rotating Program and Extended Term Columns in Summary Table.)

22. Evaluation procedures have been designed to determine effectiveness of program.

Adequate ⟷ Not Adequate

5 4 3 2 1

(Record circled score in Summer School, Rotating Program, and Extended Term Columns in Summary Table.)

ECONOMIC CRITERION — RATINGS

23. Adequate funds are available for operating rotating plan.
Adequate ⟷ Deficient
5 4 3 2 1

(Record circled score in Rotating Program Column in Summary Table.)

24. Funds are available for operating schools more than 180 days.
Adequate ⟷ Deficient
5 4 3 2 1

(Record circled score in Extended Term Column in Summary Table.)

25. Funds are available for operating summer program for selected students.
Adequate ⟷ Deficient
5 4 3 2 1

(Record circled score in Summer School Column in Summary Table.)

26. Governmental funding agencies have made long term commitment to operate appropriate year-round school program.
Adequate ⟷ Deficient
5 4 3 2 1

(Record circled score in Summer School, Rotating Program, and Extended Term Columns in Summary Table.)

27. Plans have been or will be developed to determine cost effectiveness of programs.
Adequate ⟷ Deficient
5 4 3 2 1

(Record circled score in Summer School, Rotating Program, and Extended Term Columns in Summary Table.)

LEGAL AND/OR POLICY CRITERION — RATINGS

28. Public school laws permit enrolling students throughout the year.
Permits ⟷ Restricts
5 4 3 2 1

(Record circled score in Summer School, Rotating Program, and Extended Term Columns in Summary Table.)

29. Public school laws permit students to attend school in excess of the traditional term (ie., 180 days).
Permits ⟷ Restricts
5 4 3 2 1

(Record circled score in Extended Term Column in Summary Table.)

30. State and local school board policies permit establishment of year-round policy.
Permits ⟷ Restricts
5 4 3 2 1

(Record circled score in Summer School, Rotating Program, and Extended Term Columns in Summary Table.)

RECORDING AND INTERPRETING SCORES FOR YEAR-ROUND SCHOOL CHECKLIST

According to the instructions after each item in the scale, record scores in the three columns below. After the recording is completed, obtain sum for each column. Your observed scores for each year-round program can now be converted to a readiness classification as follows:

Scores between upper quartile and maximum scores = favorable degree of readiness

Scores between median and upper quartile = change needed, but more preparation indicated

Scores between lower quartile and median scores = unfavorable, second look needed

Scores below lower quartile = unfavorable, extensive preparation needed

SUMMARY SCORING TABLE

Criteria Items	Summer School	Rotating Program	Extended Term
1	0*		0
2		0	0
3	0	0	
4			
5	0	0	
6	0		
7	0		
8	0		0
9	0		
10	0		
11	0		
12	0		
13	0		

SUMMARY SCORING TABLE
(Continued)

Criteria Items	Summer School	Rotating Program	Extended Term
14			
15			
16	0		
17	0		
18			
19			
20	0		0
21	0		
22			
23	0		0
24	0	0	
25		0	0
26			
27			
28			
29	0	0	
30			

Your Total Score	_____	_____	_____
Maximum Total Score	60	120	120
Upper Quartile Score	45	90	90
Median Score	30	60	60
Lower Quartile Score	15	30	30

December 1972

THE YEAR-ROUND SCHOOL

A Review of the Literature

The purpose of this review is to provide a summary of current readings on the year-round school. Detail is omitted partly out of consideration for the general reader, and partly to make room for the ideas of innovative thinkers who may be stimulated to develop even more effective solutions of their own. For those administrators and teachers who are more directly involved and who have questions about various details of the plans presented herein, the resources of the Research & Information Center give in-depth coverage of this concept.

QUOTATIONS CONCERNING YEAR-ROUND SCHOOLS

"It is my prediction that by 1980 the majority of schools in North Carolina will be open on a year-round basis."

- A. Craig Phillips, State Superintendent
N. C. Department of Public Instruction

"Let us find ways to keep more schools open 12 to 15 hours a day and 12 months a year to make sensible, constructive use of our multi-billion-dollar investment in facilities and personnel."

- Sidney P. Marland, Jr.
U. S. Commissioner of Education

"Tomorrow's school will provide formal education for all citizens--and it will not close its doors any more at three o'clock. It will employ its buildings round the clock and its teachers round the year."

- Lyndon B. Johnson
(February 16, 1966)

"The premise that the school year was designed in horse and buggy days to accomodate rural parents who needed their children for the planting and harvesting seasons is certainly inappropriate in the space age."

- Anthony W. Scala, Principal
Syosset, New York

"There is no logical reason for closing schools in July and August. The almost universal practice of leaving school plants and teaching personnel idle for two months every year should be carefully re-examined in the light of present circumstances and needs."

- William J. Ellena
ENCYCLOPEDIA OF EDUCATION

"In Atlanta, the word is forward and onward to better educational opportunities. Four Quarter is considered the swiftest, strongest, surest vehicle for realizing this goal."

- E. Curtis Henson, Assistant Superintendent
Atlanta, Georgia, Public Schools

"Maybe what we need, before people will consider the extended school year, is a Ralph Nader to uncover all the waste in education's traditional schedule."

- M. Gene Henderson, Superintendent
St. Charles, Missouri, Schools

"The best way to 'win friends and influence people' is not to challenge one of our traditions or to support a proposal that evokes widespread cultural resistance. Yet one cannot study the evolution of our educational system without concluding that the American people have found it necessary, at various junctures in history, to enlarge their objectives and take bold action in order to eliminate the lag between current practice and actual need. Worthy goals have never ceased to fire the imagination of this country's citizenry even when the comfortable lethargy of the status quo would have been less painful."

- Novice G. Fawcett, President
The Ohio State University

QUOTATIONS

(Cont.)

"Most school and college buildings stand unused after 4:00 P. M. every weekday, all day Saturday, and throughout the summer. Anything that can be done... through better utilization of present buildings will be money saved."

- John W. Gardner
Former U. S. Secretary of Health, Education, and Welfare

"The present school calendar of instruction is as obsolete as the ox cart, is scandalously wasteful of our material and human resources and should be abandoned because it no longer serves its original or any other really useful purpose."

- George M. Jensen, Chairman
National School Calendar Study Committee

American Association of School Administrators. RESOLUTION ADOPTED BY THE AMERICAN ASSOCIATION OF SCHOOL ADMINISTRATORS, FEBRUARY 1972. Washington, D. C.: The Association, 1972.

"Year-Round School

AASA recognizes that the year-round school in some form has become an essential part of the American public school system. We believe that the soundest reason for a year-round program is to increase the effectiveness of the educational program. Greater utilization of plant may occur, and money may be saved; these outcomes, however, are dividends rather than primary goals. We do not feel, furthermore, that a single plan can be developed which would be suitable for all school districts. The four-quarter plan with complete restructure of curriculum, the 45-15 plan, the semester and the trimester, to mention only a few, all are suited to particular kinds of situations.

"We therefore urge that school administrators work with representatives of students, teaching personnel and the community in study, planning and subsequent initiation of the type of year-round program most appropriate for their district. We recommend that adequate time be allotted to the study and planning phases."

American Association of School Administrators. THE YEAR-ROUND SCHOOL. Washington, D. C.: The Association, 1970, 36 p.

Various plans for year-round schools are discussed in this pamphlet. Since space does not allow for in-depth coverage of all these plans, emphasis will be placed on two proposals--The Fulton County, Ga., Four-Quarter Plan and the Multiple Trails Plan. These plans offer considerable promise and were designed for secondary schools.

Fulton County, Georgia, Four-Quarter Plan:

The purpose of the four-quarter plan is to improve the educational opportunity of students. It is not a program to save money, to use the school plants on a year-round basis, to schedule children into a space-saving master schedule to relieve an overcrowded condition, or to accelerate students through high school. However, this program could make provisions for some of these in the long run.

. One of the major reasons for the four-quarter plan is the need for a quality program during the summer months. With this in mind, a program has been designed that will meet the standards of the total school program without regard to the quarter in which they are selected.

. The school year consists of four quarters with the same amount of time in each quarter. The first quarter begins in September and the fourth quarter ends in August. This allows for a few days between each quarter, and for the usual holidays.

. Each student is required to go to school three of the four quarters each year, with the fourth quarter the optional.

. In this four-quarter school plan, the Carnegie Unit has been abandoned in favor of a more flexible credit hour system.

. One of the most significant contributions the program will make to education will be the new curriculum developed specifically for it. All subject areas have been reorganized into quarter courses independent of each other. The number of courses required in each discipline will depend upon needs of that discipline. Wherever possible these courses have been developed so that they are independent and may be taken without regard to sequence.

. The new course structure provides stimulation and learning opportunities for all students. There is a range of courses from the remedial to the very sophisticated. Furthermore, if a student is misplaced, he may be rescheduled at the end of any quarter. In fact this structure will allow the school to tailor-make a schedule to meet the needs of the individual student. This gives the student and his counselor an opportunity to evaluate the student's progress and guide him in a more successful direction.

(Cont.)

American Association of School Administrators. THE YEAR-ROUND SCHOOL. (Cont.)

The Multiple Trails Plan:

. Directed toward both educational and economy objectives, this plan provides for the reorganization of the secondary school.

. The plan may, but need not, utilize chronological acceleration of pupils.

. It can provide an immediate release of 25-26 percent of available secondary-level classroom space.

. The school day is rescheduled into time modules of 15-30 minutes long. The rescheduling may provide less instructional time per week in a given subject, but over the extended year, the total yearly instructional time will be equalized.

. This plan may be implemented in four stages; however, pupil involvement should be limited to Stage One if immediate economy is desired.

. Stage One - With the adoption of a lengthened school year and multiple time modules, Stage One immediately releases pupil time, instruction time, and classroom space. Pupil time is released because, although over the extended year the pupil will receive the same total instructional time per class, he may meet his class less often and possibly for shorter periods. While over the year the student continues to receive the same amount of instructional time, the new schedule reduces the number of daily teacher contacts per day and week and releases what may be called "E" time. The rescheduled day also changes the nature of the teacher's day and week. With fewer daily pupil contacts and fewer daily preparations, the teacher also has "E" time, which may be scheduled into a free daily period or may become a free block of time one or more days each week. The teacher might use this free time at such work as curriculum revision. Classroom space is also immediately released with the new time arrangement. It is estimated that the plan will result in a 25% increase in classroom space for classrooms used eight periods a day. If a small adjustment is made in the length of the school day, the increase in classroom space may approach 37.5%.

. In Stage Two, extra pupil learning time may be used for pupil acceleration. In Stage Three the primary objective becomes provision for individual pupil needs. Extra pupil and teacher time is spent on remedial, corrective, and enrichment programs. In Stage Four, the adoption of a program of continuous progress is basic. Grade lines at the secondary level become insignificant, and pupils move along a subject trail at their own rates. Pupil schedules may be compacted to enable acceleration. This stage requires considerable curriculum revision, with the traditional curriculum organized into broad resource units that can be completed in 4-6 weeks.

Anderson, B. Robert. "'Four Quarter' Makes a Whole Year in Atlanta," SCHOOL MANAGEMENT 16:7-11, June 1972.

In Atlanta, Georgia, educational innovation is the watch-word, and past history is no basis for dealing with current problems. Instead, a new philosophy permeates the city's high schools. Atlanta's Four-Quarter School Year Plan came about because of a desire to update and improve the curriculum rather than for economic reasons. It is considered a great success by the people involved in it. Attendance is mandatory for three quarters of the year and voluntary for the fourth quarter. Almost 13,000 pupils opted to attend the fourth quarter (about 39%) rather than take a vacation. The fourth quarter may be used for acceleration or enrichment. The regular school program is in effect all year long.

Some of the benefits of the Four Quarter Plan are:

- Continuous student progress.
- Technically, there are no failures.
- Teachers have the opportunity to work year-round if they wish, at increased salary.
- Buildings remain open and are not as subject to vandalism.
- Closing and opening preparations are minimized.
- 100,000 students are not dumped on the streets at one time.
- Students may attend school part-time and earn money through the year. (One student has managed to accumulate $1,000 in one year to be used for college tuition.)
- The dropout rate has decreased.
- A student can adjust to his own learning style.

Since textbooks are not written on a four-quarter basis, the content of the new program required new teaching guidelines. Each new course contains specific information on: student characteristics, course description, administrative requirements, content, behavioral objectives, suggested procedures, references and aids, performance objectives and evaluations. Many of the teachers were involved in writing these guides, and each team had a librarian assigned to it. There are 900 different courses being offered in Atlanta high schools. Many of these courses take students out into the community. Each quarter students select the courses they wish to take and scheduling of courses is based on what the students want to study. The role of the computer is a large one. The computer is not only used for scheduling, accounting, and some instruction of students, but it also handles many other tasks such as diagnostic testing, an AV booking system, student records, and many other tasks.

Bauman, W. Scott. THE FLEXIBLE SYSTEM: AN ECONOMIC ANALYSIS OF ADVANTAGES OF THE QUARTERLY CALENDAR IN PUBLIC SCHOOLS. Toledo, Ohio: The University of Toledo, College of Business Administration, 1966.

The purpose of this study is to examine the possible advantages to be derived from the adoption of a quarterly system in the public schools. The quarterly system examined here will be called the flexible system. The flexible system is a school schedule in which only 75 per cent of the student body is in session attending classes at any one time. The remaining 25 per cent is, therefore, not in attendance. Each pupil attends school, on an average, three of the four school quarters.

A number of direct benefits to the schools may result with the adoption of the flexible system. Some major benefits are:

(1) Children would have the opportunity to obtain a better quality education at no additional public cost.

(2) By employing and paying the teaching profession 11 months a year, we are increasing the efficient utilization of a talented and skilled segment of the nation's human resources.

It is stated that the public should become aware of the choices which need to be made. These are:

(1) Pay the higher taxes necessary to support a good quality public school system using the traditional year;
(2) Accept deficiencies in public school programs employing the traditional year; or
(3) Accept the personal inconveniences associated with the flexible system.

The advantages offered by the flexible system may be particularly significant for communities where:

(1) Pupils are attending school in crowded or substandard facilities.
(2) Pupils are attending school for less than a full day. This would include many of the half-day and split session type school days.
(3) The school district is unable to hire fully-qualified teachers.
(4) The existing pupil-teacher ratio exceeds established standards.
(5) Worthwhile and important subjects are not offered in the school program because of lack of funds.
(6) The district's assessed property valuation per pupil is rather low.
(7) The school tax millage rate is rather high.
(8) Total pupil enrollment is increasing rapidly each year.

Delaware State Department of Public Instruction. FEASIBILITY OF RESCHEDULED SCHOOL YEAR PLANS FOR DELAWARE PUBLIC ELEMENTARY AND SECONDARY SCHOOLS. Dover, Delaware: The Department, 1969, 63 p.

Introduction - For many years there has been concern about the inefficient and uneconomical use of existing school facilities and personnel. School buildings sit idle for three months each year while many teachers become waitresses or factory workers. In the face of ever-increasing costs for education, the taxpayer is demanding that educators re-examine the way the tax dollar is being spent.

Statement of the Problem - In brief, the study team from the Delaware Department of Public Instruction and Research for Better Schools, Inc. sought to determine whether there exists within rescheduled school year plans a design or designs that could be adopted or modified for utilization in Delaware, to provide improved educational opportunities for children while providing for more efficient use of staff and space.

Procedures - The study team sought to answer the above questions by an extensive review of the literature, by visiting school districts where rescheduled school year programs are in operation, and by consultation with authorities in the field.

Findings - The study team found that there exist three basic approaches to rescheduling the school year: (1) staggered attendance, (2) summer term, and (3) extended term.

Recommendations - In light of the findings of this study, it is recommended that pilot programs be implemented in selected Delaware school districts to test the feasibility of the following approaches:
(1) At the elementary level, an extended term for all students - The extended term of approximately 200 days could provide additional instructional time and thus greater flexibility in the instructional program. The extended term could also mean fuller utilization of school staff and facilities and improved pay and status for teachers.
(2) A voluntary summer program at the secondary level - The voluntary summer session could increase educational opportunities without necessitating a major overhaul of school organization and curriculum. Students could be offered the chance to broaden their studies, to accelerate their progress, to take additional work in areas they find troublesome, to make up work they failed or missed because of absence. This program would utilize school buildings and materials which would otherwise lie idle throughout the summer. It would offer summer employment to teachers and would be a step toward taking full advantage of their professional skills.
(3) Source of funding for recommendations (1) and (2) - It is recommended that the pilot projects be funded one third from State funds, one third from ESEA Title III, and one third from local sources.

"Doors Are Closed--Reasons for Lengthening the School Calendar," EDUCATION DIGEST 38:28-31, November 1972.

The article is a condensation of a report of the Commission on Public School Personnel Policies in Ohio, 4-12, 39-40, entitled TIME AND OPPORTUNITY--THE SCHOOL YEAR.

At the 1972 National Seminar on Year-Round Education there was a common interest and concern over the present school calendar. Interest in revising the calendar is not new, although it may never have been so intense and widespread. The usual stimuli include growing enrollment, rising construction costs, and tight money.

The school calendar as we now know it assumed its present definition about 1915, as two conflicting interests were resolved. Up until that time, cities had favored long school years, even operating on a full-year basis; rural areas favored relatively short ones, due to the need for workers in the fields during spring, summer, and part of the fall. There was no suburbia. Schools appear to have responded primarily to the needs of the community and secondarily to the educational needs of students. But gradually cities moved to longer holidays while rural attendance patterns lengthened. By about 1915 the traditional school calendar of around 180 days became standard.

Unfortunately, the calendar has become a deep-rooted tradition, and changes in the school year frequently become emotional issues. It seems imperative that more information be made available so that decisions can be made intelligently. It is also essential to consider objectively the shortcomings in the typical school calendar. The calendar of the twenties and thirties--which most of our schools presently follow--legitimized a disruption of the learning process and the consequent loss of learning time; it also met the needs of the time. The needs of the seventies, however, are highly complex. Continuing adherence to the traditional calendar with its constraints on program and method limits adequate preparation of children for the challenges of the seventies.

There are two primary questions regarding the typical school year and its effect on students. The first has to do with the actual value of the long summer vacation. The second concerns the possibility that our present practice of shutting down regular schools for three months may reduce the effectiveness of what is attempted in the other nine months. There is little basis that children need a long period of rest during each year. Few students travel, camp, or visit relatives for the full vacation period today. On the other hand, in large cities, the annual summer release of tens of thousands of youngsters creates an immense burden for recreational facilities; results in boredom; compounds the problem of supervision, leading to vandalism and other crime; and in the case of older youth, floods the market with youngsters whose skill levels are insufficient to enable them to compete for the few summer jobs available.

Teachers' professional needs are also limited by the traditional calendar. It is hard to find any other profession where the practitioner is denied the right actively to practice during a quarter of each year.

Ellena, William J. "Year-Round School Programs," THE ENCYCLOPEDIA OF EDUCATION 9:596-602. New York, New York: The Macmillan Company, 1971.

"There is no logical reason for closing schools in July and August. The almost universal practice of leaving school plants and teaching personnel idle for two months every year should be carefully re-examined in the light of present circumstances and needs," begins Ellena.

Year-round schooling has several positive features, both fiscal and educational. Some of these are:

. The school plant to be used already exists, fully equipped and ready for use.
. Overhead costs for administration and fixed charges, such as insurance and interest, frequently remain fairly constant whether the schools are open or closed during the summer.
. Teachers (especially male teachers), if offered full-time employment and, consequently, better annual salaries, will not be forced to leave teaching for other occupations offering greater remuneration.
. Since many children, especially those living in towns and cities, have few other constructive things to do during the summer months, attending school may be the most useful activity available to them.
. Teachers have an opportunity to become better acquainted with students and parents.
. The professional growth of teachers is accelerated.
. Opportunities are available for improving educational programs and for giving adequate orientation to new teachers.

Several basic plans for year-round schooling are discussed. These are summarized as follows:

. Four-Quarter, Staggered-Vacation Plan - A four-quarter, staggered-vacation plan utilizes a 48-week school year divided into 12-week quarters. The student body is divided into four groups, and each group attends school for three quarters, or the usual nine months. Teachers may follow the same vacation plan as the group of students they teach or may elect to work all 48 weeks. The advantages claimed for this plan are 25% more pupils are taught by the same size staff, using the same number of classrooms, laboratories, libraries, and playgrounds. Pupils graduate on schedule, and double shifts, which shorten each student's school day, are unnecessary. A warning is offered, however: if a school is overcrowded, the all-year plan can help to ease the load, but the full savings can be obtained only if the number of pupils can be divided exactly by four so that a capacity load will be in attendance every quarter. Unused classrooms or teachers with substandard loads reduce the theoretical economy. It is also difficult to provide and administer many kinds of extracurricular and scholastic activities under a staggered-vacation plan, i. e., athletic events, band, drama, debate teams, etc.

(Cont.)

Ellena, William J. (Cont.)

Forty-Eight-Week School Year - This plan involves having regular school in session for 48 weeks, with four weeks of vacation distributed throughout the year. Children could complete 12 years of school in 9 years, and the longer school year would be voluntary. In districts where this plan was tried, the practice was discontinued because it was too expensive and because serious complaints were voiced that those high school students graduating early were too young for regular employment and too young to succeed in college. In 1955, the Fairfield, Connecticut, Citizens' School Study Council studied such a plan in which students would be required to attend classes for at least 11 months every year. After considerable study, however, it was decided that the social and administrative disadvantages of this plan far outweighed the economic advantages, and the plan was rejected.

Multiple Trails Plan - Utilizing an extended school year, modular scheduling, and continuous progress, this plan is a proposal for reorganization of the secondary school and is directed toward both educational and economic objectives. It can provide an immediate release of about 25% of available classroom space. The school year is 11 months long, containing 210 school days. There is a July or August vacation, and the traditional winter and spring vacations. The length of the school day remains the same, but the day is rescheduled into time modules which vary in length from 15-30 minutes, depending on the individual school's decision. Classes are scheduled in terms of time modules, which replace the conventional, longer class periods. This rescheduling reduces instructional time per week in each subject, but because the school year is longer, the total annual instructional time in each subject remains the same.

Voluntary Summer Programs - A regular 36-week or 40-week program supplemented by a voluntary summer program varying in length from 4 to 12 weeks is the basis of this plan. These summer programs provide for remedial and accelerated work. The major emphasis is placed on enrichment--that is, providing educational experiences above and beyond those offered during the regular term. Teachers may be hired for a regular nine-month term and given a choice as to teaching summer school. The additional cost involved is the primary drawback of the summer program.

Sections on summer programs for professional personnel, college-level summer programs, and decision-making on school-year length conclude this chapter.

"Exploring the School Year," Entire issue. COMPACT 4:3-48, December 1970.

The articles deal with the following topics:

. The year-round system adopted by Atlanta, Georgia

. Legislative action in Michigan

. Experience with year-round school operation in California

. The use of a voluntary experimental program to encourage public acceptance of a mandated program

. . Permissive legislation in Pennsylvania

. The simultaneous introduction of some sixty innovations in the year-round plan of the Wilson Campus School at Mankato (Minnesota) State College

. The expanded school year in Florida

. Summaries of existing state laws governing the school year and state activities in support of the extended school year

. A position paper adopted at the 1970 national seminar on year-round education.

Of particular interest might be the articles by John D. McLain and George Isaiah Thomas. McLain reports on the actual experiences of school districts that have implemented a variety of plans. He makes the important point: "These various programs have emerged in response to specific community needs. Since the needs differ from community to community, so do the details of the plans." He points out that many plans are most suited to a situation where there is a "rapid increase in enrollment without an adequate tax base to provide the necessary construction." Thomas points out the kind of legal questions that should be asked before a district moves into a reorganized school year. For most plans, permissive legislation is likely to be required. Thomas emphasizes that dollar savings are not likely to occur unless a plan is mandatory. He deals in some detail with the question of whether or not savings are likely to actually occur. He points out the need to analyze all factors contributing to school costs--debt services, maintenance costs, and operating costs--before asserting that a reorganized school year does or does not cost more than a traditional one. He also states that the selling of a rescheduled school year to the teachers and the community may be a difficult task.

Friggens, Paul. "Should We Switch to Year-Round Schools?" THE PTA MAGAZINE 66:2-5, March 1972.

After visiting many school districts around the country which are trying year-round schooling, the author strongly endorses the concept. His article focuses on Valley View's 45-15 Plan; however, many lesser-known plans are also enjoying success. Francis Howell School District in St. Charles, Missouri, which has a plan closely resembling 45-15, is now operating in its third year. It has been so successful that it will be extended to the entire district. Forced to go on split sessions or pay higher property taxes for new buildings, the St. Charles district voted heavily for year-round schools. Superintendent M. Gene Henderson summed up the district's experience: "No doubt it has increased the administrative workload, but on the whole the year-round school has been successful. There are no appreciable savings in operating costs, but for the long term, we expect to cut new building costs to 80% of what we might ordinarily have spent. Parents have gradually adjusted, and the continuous school, with three-week vacations during four seasons of the year, seems better suited to human nature. Both students and teachers get in the doldrums, and they need a break. We've had to spend $80,000 for air conditioning, but it has been well worth it."

Mora, Minneapolis, 60 miles north of the Twin Cities, adopted it in frustration after losing two school-bond votes. "We were beginning to lose educational quality because of overcrowding," says Superintendent Pius J. Lacher. Having rejected three bond issues that would have provided new schools in mushrooming subdivisions and replaced earthquake-hazardous buildings, San Diego expects to start operating several all-year schools on July 1, 1972. Eventually, it hopes to put all 153 city schools on a year-round basis. Kentucky's largest school system, Jefferson County, plans to offer an all-year program to its 97,000 students, grades 1-12, in August 1972. Chicago is trying it in three elementary schools. Baltimore may be next, and many districts over the Nation plan pilot programs. Pressed for financial relief to the schools, nearly 20 states, including California, Texas, and Massachusetts, have passed enabling legislation for year-round schools.

Our public schools are coming out of cold storage and the year-round idea is winning respectful attention. The prestigious American Association of School Administrators (AASA) now urges educators to "re-examine the almost universal practice of leaving school plants and personnel idle at a time in our history when every available resource is needed."

Gallup, George H "Fourth Annual Gallup Poll of Public Attitudes Toward Education," PHI DELTA KAPPAN 53:33-46, September 1972.

The survey is the fourth in an annual series designed to measure and record the attitude of American citizens toward their public schools This year the percentage of citizens favoring the year-round school has reached a clear majority. For the nation, 53% approved, and 66% of the professional educators approved.

Of the nine major problems of the public schools that were cited, three are related to the year-round school. These are: (1) lack of proper facilities; (2) too large classes; (3) lack of proper financial support.

The section of the Gallup Poll which deals with year-round schools is quoted below in its entirety:

"Year-Around Schools

"The proposal that schools be kept open the year around is gaining acceptance throughout the nation. When parents discover that this plan need not interfere with family vacations, some of the opposition is removed.

"The percentage of citizens favoring the year-around plan has now reached a clear majority. This question was asked in the latest survey:

"To utilize school buildings to the full extent, would you favor keeping the school open year around? Each student would attend school for nine months over the course of a year. Do you approve or disapprove?

"For the nation, the results show:

Approve	53%
Disapprove	41%
No opinion	6%

"The professional educator group is even more favorably inclined towards this proposal, as revealed by the following figures:

Approve	66%
Disapprove	30%
No opinion	4%

"The trend in favor of the year-around concept is evidenced by comparing the 1970 figures with the present. In the survey two years ago, a total of 42% of the nation's adults approved, 50% disapproved, and 4% had no opinion."

Gillis, Reid. THE 12-MONTH SCHOOL: A NEW APPROACH. New London, Connecticut: Croft Educational Services, 1969.

Written for administrators, this resource manual focuses on the four-quarter plan in Atlanta, Georgia. It offers many helpful suggestions for educators who are considering implementation of a year-round school.

Part A of this folio reviews the need, outlines the benefits, and discusses the rationale for a school operating four quarters a year. It gives a sample school calendar outlining the four quarters. It also presents the new credit hour plan which has replaced the Carnegie Unit. A sample proposal which was submitted to local boards of education and the state education agency is offered.

Gillis summarized the advantages of the four-quarter plan as follows:

- It is believed that a program developed on achievement levels makes it possible for a student to experience some personal success. This can do much to keep the potential dropout in school.
- One of the major problems in the city begins in June when teenagers are out of school. The quarterly plan is considered as a possible solution to the juvenile delinquency problem.
- Some large employers are urging this type of scheduling because it would be possible to schedule employee vacations all year instead of in summer only. Many businessmen are interested in employing high school students on a year-round basis. If four students could be employed one quarter each, this would be equivalent to one full-time employee. Students who need part-time employment often cannot find work when all students are out at the same time.
- If provisions are made in the program for the attendance option, it is possible for a school overcrowded with 1,000 students to have 750 students in each of the quarters. It would also be possible to educate in three schools the same number of students now requiring four schools.
- It is unlikely that students would be encouraged to plan for early graduation in wholesale numbers. However, through careful counseling, a student may be permitted to go to school four quarters per year for three years and graduate from high school one year earlier.
- Many students could gain admission to college at the start of the winter term rather than at the peak time.

The major objections to the 12-month school were thought to be:

- The additional cost is usually the chief complaint. The best way to handle this objection is to point out the advantages, and not try to hide the costs.

- Parents fear that children will be given vacation at unsuitable times. This objection was met in Georgia by emphasizing that the student and his parents will have the option of determining which quarter to take for vacation.

(Cont.)

Gillis, Reid. (Cont.)

Objections (Cont.)

- Owners of summer camps and other summer services feel that keeping the schools open all year will hurt their businesses. Most students will continue taking summer vacations, however, and by having a system that allows vacations in the spring and fall seasons might make it possible for the summer entrepreneurs to extend their business season.

- Some have thought that maintenance would become a problem without the summer months to devote exclusively to building improvements and repairs. New materials that are now available eliminate much of this problem. Today a room can be painted at 5 p. m. and can be ready for use the next morning. A floor can be waxed and buffed within an hour. The Georgia schools have night maintenance crews.

- Some people feel that teachers will balk at the idea of working four quarters. The fact is that they do not. Teachers should be involved in planning for the lengthened school year from the earliest stages. They are the key to the success of such a plan. They need to understand the schedules and have the opportunity to contribute to new curriculum packaging.

Part B of the folio contains plans for a new curriculum relfecting the flexibility of having four operating quarters. It is stated that the essence of a successful quarterly plan is a revised curriculum schedule. The four-quarter plan requires that the lockstep of traditional scheduling be broken. The folio goes into detail on creating a quarterly curriculum. It provides an explanation of a numbering system designed to provide easy, fast identification of courses. These numbers may be easily converted for computer use. It then gives sample course guides.

Part C of the folio outlines procedures for implementing the plan, informing the public, teachers, and students. Eleven exhibits include representative newspaper reports, suggested topics for speeches, and new forms for student records, transcripts, and report cards. A list of the most commonly asked questions concerning the 12-month school is presented.

Hermansen, Kenneth L. and Gove, James R. THE YEAR-ROUND SCHOOL. Hamden, Connecticut: Linnet Books, 1971, 154 p.

Written by the superintendent and assistant superintendent of Valley View School District 96, Romeoville, Illinois, this b[illegible] reports on the history, rationale, and implementation of the 45-[illegible] Continuous School Year Plan. Essentially a case history, the book was written for the guidance of other school administrators, board members, and citizens interested in bringing economy, accountability, and educational efficiency to their schools. It seeks to "provide administrators and board members with an accurate chart for navigating the admittedly troubled waters of pioneering in a new phase of school administration."

The first five chapters are devoted to the history and state of the art. They collect, condense, and evaluate the voluminous literature that Valley View used in formulating calendar revision plans. These five chapters present pros and cons and give explanations of the many varieties of year-round calendar proposals.

Chapters six through twelve record the evolution of Valley View's 45-15 plan--the legislative, policy, and administrative steps that were necessary to bring the 45-15 plan to fruition; and the daily problems of planning, faculty relations, community communications, and management that brought the plan to the working stage.

The authors state that scores of school administrators and school board members who have visited District 96 during the past year agree that the 45-15 plan is the most workable, most viable form of calendar revision that has been proposed.

Facts About the 45-15 Plan:

. The Plan is simply a revision of the school calendar. It does not change the total number of days that students attend school. Each student attends classes for a total of 180 days, just as he would under a traditional calendar.

. Instead of a long summer vacation of three months, the vacation is split up into four short vacations of three weeks duration each, which are scheduled in the fall, the winter, the spring and the summer. In addition students and teachers enjoy the traditional Christmas and Easter holidays, and an additional week or 10 days off at the end of June.

. The 45-15 school calendar does increase utilization of school buildings by one third. Three fourths of the students are in school at any one time, while the fourth group of students is on the three-week (15 day) vacation. Thus the 45-15 plan gains greater use of school buildings solely through efficient year-round scheduling, instead of letting them remain idle for three months during the summer.

(Cont.)

Hermansen, Kenneth L. (Cont.)

Facts About 45-15 (Cont.)

. The 45-15 plan must be distinguished from the staggered four-quarter plans, or from extended year plans. The staggered four-quarter plans stay with the traditional three-month vacation period, except that one fourth of the students are let out for a full three-month vacation in each season--the fall, the winter, the spring, or the summer. The authors are firmly convinced that parents will kill any staggered quarter plan, just as they did in Aliquippa and Ambridge, Pennsylvania. After all, "Who wants to see kids out on the streets for three months in mid-winter?"

. The extended year plans are generally an extension of the familiar summer school programs--except that they usually last for fifteen weeks instead of eight. Most extended year programs are voluntary--at the most, they have attracted from one fourth to one third of the total school enrollment. They do not achieve an increase in the total number of classrooms available to house the enrollment--the principal gain of 45-15.

. The 45-15 plan is not an acceleration plan. It does not rush kids through school, to graduate a year or two before they are intellectually, physically, and socially ready for completing either elementary or high school.

Teachers' Reactions:

Teachers generally like 45-15. They have the option of working 180 days or as many as 274 days. Two out of three teachers at Valley View schools have chosen to work more than 180 days a year, electing some 27 different contract terms. The average Valley View teacher earned 27% more than he would have earned under a conventional school calendar in 1970-71. Male teachers, especially, like the longer contract year, which enables them to work at their chosen profession all year, instead of seeking part-time jobs in less rewarding summer jobs.

Kansas State Department of Education. THE EXTENDED SCHOOL YEAR: A SUMMARY; A BIBLIOGRAPHY. Topeka, Kansas: The Department, 1972.

The NEA in late 1971 estimated that 600 school districts in the U. S. were studying proposals that would extend the school year beyond its nine-month calendar. To date only a few have actually adopted year-round plans but scores may follow suit before the end of the school year.

Historically, beginning in Bluffton, Indiana, back in 1904, year-round experiments were dictated by space needs and more economy. All were subsequently abandoned. Around 1967, however, a few school districts began to re-examine the extended school year concept. The primary need was space to house rapidly rising enrollments but a move was also made toward improving educational opportunities.

Economy has been the most important reason for interest in year-round school programs. It is argued that most communities could realize considerable savings by fully utilizing the existing buildings and other facilities. On the other hand, some research has indicated that an extended school year program instead of reducing operating costs actually would result in increased costs of operation. In many states existing laws and regulations require changes before a longer school year can be adopted.

Other major problems are: opposition to vacation time other than summer; lack of air-conditioning; and teaching year-round from the standpoint of summer education, opportunity to travel, teaching fatigue. Proponents of the year-round school counter that vacation in other seasons can be just as rewarding; it costs no more to air condition classrooms than to build new ones; and teachers should have the opportunity to work all year at their profession.

The Valley View 45-15 Plan and the Atlanta Four-Quarter Plan are elaborated on; however, since they have been covered so extensively in other parts of this review, they will not be dwelt on here. Other forms of the extended school year that look specifically to educational enrichment are the Park Elementary School, Hayward, California and three schools in Miami, Florida. Under the Hayward School's "50-15 Plan," school is in progress for 200 days, with attendance compulsory for all four quarters. Three weeks of vacation follow each 10-week quarter. The enrollment was 500 and their plan was adopted for two more years in 1970. In Miami, three schools have adopted the "quinmester" plan. The school term is divided into five 45-day quarters (225 days). Attendance is mandatory for four quarters.

A five-year study by the New York State Education Department produced three types of plans: the 11-month school provides 11 instead of 9 months of school, with the objective to complete work for graduation in 10 years; the Multiple Trails Plan divides the day into shorter classtime segments but the same amount of time is spent on a course by extending the number of school days from 180 to 210; Continuous Progress Plan provides a 210-day school year using the extended time for both enrichment and release of classroom space. Still another plan would provide seven sessions over the entire year. Pupils would attend five of the seven sessions, spending the same time in classes as they would under a 9-month program.

National Education Association. CONSIDER A YEAR-ROUND SCHOOL. Washington, D. C.: The Association, 1972.

Rationale:

Schools are closed during the summer months because children were once needed for farm chores and other summer employment. Since we no longer live in an agrarian society and do not offer vast opportunities for summer jobs for young people, the original rationale for the traditional school year no longer exists. In addition, there is the problem of money. Most state and local governments have nearly reached the limit of their revenue sources. Under the circumstances, using existing educational facilities rather than closing them for part of the year, thus delaying the need for additional construction, could offer relief for hard-pressed school budgets.

Various Plans for Year-Round Schools:

The 45-15 Plan - Students go to school 45 class days, then have a three-week vacation (15 class days)--all year long, but in rotating shifts. Each shift ends up with 180 class days a year, three months of vacation taken in four three-week breaks, and the usual holidays.

The Four-Quarter System - Students attend school three out of four 12-week quarters, or for about the same 180 days as the school term is now. Only 3/4 of the students are in school at one time, while the fourth group has its vacation. The school facilities are in constant use and can accommodate one-third more students. Teachers may choose to work year-round, with one week off between each quarter. Many of the experiments have proved that the practical disadvantages of this plan outweigh the theoretical advantages.

Extended School Year Plans - These plans call for more days of schooling each year, shorter vacations, improved curriculum design, and possibly eventual economies through acceleration (students complete their required schooling in one to two fewer years). In the Continuous School Year Plan there are no term divisions. Pupils progress continuously, completing more than one grade per year, and have vacation for six to seven weeks in the summer. Trimester and quadrimester plans divide the school year into three or four terms that total 200 to 225 days, with a shortened summer extended school year and uses "time modules" rather than the longer conventional class periods. Its immediate advantages are to free classroom space and teacher time, and it also offers the eventual possibility of using such time for acceleration and/or enrichment.

Answers to Some Questions Parents Ask:

Can the children adjust to a year-round school?

Thousands of children have been involved in these new schedules and they have shown no ill effects. Short vacations several times a year can be more beneficial than one long break and can reduce the need for extensive review on return.

National Education Association. CONSIDER A YEAR-ROUND SCHOOL. (Cont.)

Answers to Some Questions Parents Ask:

Can learning really take place in hot weather?

Research studies show that children learn as well during July and August as they do during other months. (Air conditioning is a must in warm climates.)

Will parents be able to take vacations with their children?

Vacation patterns are changing. Many workers are taking several short vacations rather than one long one. Few families go away for three months in the summer. Many families, especially those where the father works in a seasonal occupation with the heaviest pressure in the summer, would find new opportunities in rescheduled vacations.

What about summer jobs for youth?

Young people who wish to take jobs during vacation may well find it to their advantage not to be competing with one another for jobs all at the same time.

What are the major factors a school system must consider with regard to year-round schooling? The different ways the school year might be extended and the advantages and disadvantages of each; the legal implications; the costs of each plan and financial resources available to meet them; the equitable assignment of staff; the needs and opinions of the community as a whole; and the results of past experiments with various plans.

Conclusions:

Deciding on the most suitable plan of school-year organization is up to each school district. Certainly an idea that carries with it the potential for improving education, as well as the promise of more efficient use of facilities and staff, deserves consideration. Parents should be prepared to keep an open mind, be informed, and think in terms of the best possible education for their children.

National Education Association. Research Division. THE RESCHEDULED SCHOOL YEAR. Washington, D. C.: The Association, 1968.

This summary of research provides a broad look at plans for rescheduling the school year and summarizes such research as has come from experimentation with an all-year school. It should be noted that this summary was prepared four years ago and does not include some of the more recent year-round plans.

Brief Descriptions of Plans:

Continuous School Year Plan - Based on a 210-day school year, this plan calls for the completion of the regular year's work in 180 days, with the remaining days spent on the next grade's work. By the end of the sixth year, or learning level, seven regular grades' work will have been completed.

Multiple Trails Plan - Multiple Trails may be implemented in four stages and may be economically or educationally oriented. Through use of multiple time modules and extended year, classes meet less often, for varying lengths of time. This releases classroom space, teacher and pupil time immediately, if limited to stage one. In stage two, some of the extra pupil time may be used for acceleration. Stages three and four use extra space and time for educational objectives. In stage three, space and time reserves may be used for remediation, enrichments, etc. Stage four calls for a program of continuous progress. Schedules may be compacted for acceleration.

Two Semesters Plus Modified Summer-School Plan - This plan deliberately accelerates pupils through secondary school by allowing them to take new academic subjects during the summer. A pupil may complete up to one and one-half courses during a seven- or eight-week summer session.

Trimester Plan - A longer school year divided into three terms is called for in this plan. With a slight increase in the length of the daily class period, a pupil can complete two semesters' work in two trimesters. The plan enables pupil acceleration through secondary school, but also includes a varying number of "E" terms, which may be used for a variety of purposes.

Quadrimester Plan - Primarily for the secondary school, but lending itself to the elementary school, this plan divides a 204-220-day year into four quadrimesters of 51 to 55 days each. Through lengthened class periods, average or above average pupils can complete a regular 180-day course in three quadrimesters. The plan enables pupil acceleration through the secondary school, but also includes a varying number of "E" terms.

Extended K-12 Plan - This plan, a composite of other designs, may have several variations. One typical variation involves a 204-225-day year, with grades K-6 using the extra days for mastering fundamentals and broadening and enriching backgrounds, and grades 7-12 on a trimester of quadrimester plan. Projected economic savings are based on the elimination of one year of schooling out of 13.

National Education Association. THE YEAR-ROUND SCHOOL--A STATEMENT ADOPTED BY THE NEA REPRESENTATIVE ASSEMBLY, JULY 1970, SAN FRANCISCO, CALIFORNIA. Washington, D. C.: The Association, 1970.

In October 1969, the NEA Executive Committee referred the subject of the year-round school to the Association of Classroom Teachers. ACT prepared this statement, which was endorsed by the NEA Executive Committee and Board of Directors and subsequently adopted by the NEA Representative Assembly:

"The National Education Association recognizes that, although potential values may be gained from rescheduling the school year, the extension of the school year may not in and of itself necessarily be in the best interest of the students and the community. The NEA recognizes further that no one model for the year-round school is universally desirable or applicable but rather that each school district should vary the design of its school year to fit its own needs. Therefore, the NEA urges its state and local affiliates to take the initiative--

"1. In exploring the many ways the school year might be extended to accomplish specific goals (remedial, enrichment, acceleration, recreational, etc.) for students.

"2. In examining ways to provide for maximum use of school facilities by the community as a whole.

"3. In identifying the advantages and disadvantages of each proposal.

"4. In considering the legal implications of a rescheduled school year, (e. g.: Do state laws permit flexibility of programing and use of state school aid for an extended school year?).

"5. In assessing the adequacy of the financial resources and current school facilities (e. g.: Is air-conditioning a major factor to be considered in relationship to programs proposed for implementation during the summer months?).

"6. In determining ways of selecting and assigning staff which will be both effective in terms of the school program and fair and equitable in terms of the demands placed on staff.

"7. In encouraging and helping develop plans for experimentation by the local system in the rescheduling of its school year toward the end that the school system individualize and maximize its school program to best meet the needs of its students and the community.

"8. In evaluating carefully the results of the experimentation and providing basic facts for further consideration.

"9. In providing for incorporation into the regular school program of those models of the extended year which indicate value through experimentation.

(Cont.)

National Education Association. STATEMENT... (Cont.)

"10. In keeping the public informed and involved as the plans and possible implementation of an extended year are conceived and developed.

"The NEA maintains that all concerned parties--representatives of the local professional association including classroom teachers from the various grade levels, administrators, board of education, and key community groups--must be involved from the beginning in exploring and implementing any program for extending the school year

"The NEA believes that, regardless of the models designed for experimentation and their ultimate implementation, the local association has a responsibility to its members to negotiate compensation on a pro rata basis of the contracted year for those teachers engaged by the school district for services beyond the regular school year.

"The NEA recommends that THE RESCHEDULED SCHOOL YEAR (NEA Research Summary 1968-S2)--which (a) provides historical background, (b) summarizes the benefits and problems identified to date by school systems which have extended the school year, (c) describes a variety of interesting and significant year-round programs, and (d) lists a comprehensive selected bibliography--be used as a basic resource document in initiating a study of the year-round school."

National School Public Relations Association. YEAR-ROUND SCHOOL: DISTRICTS DEVELOP SUCCESSFUL PROGRAMS (EDUCATION USA SPECIAL REPORT). Washington, D. C.: The Association, 1972.

The year-round school, as an educational innovation, is here. What has happened since 1966 is reported, step by step, in this new report--a comprehensive wrap-up of what's going on in the year-round school movement.

School districts in 27 states are exploring pros and cons of the year-round school concept. State legislatures and boards of education are providing enabling laws and issuing guidelines. And 25 school systems are operating full scale year-round programs or pilot programs.

The National School Public Relations Association, a division of the National Education Association, concludes that the year-round school movement will continue to grow because of pressure from legislatures and the public to get more for tax dollars.

While most school districts do not approach the year-round school programs as a money-saving device, some have found ways of saving. The report also points out that community support is essential for adoption of a year-round school program, and it tells how some school districts presented the pros and cons and the alternatives and let the community make the final decision.

This report also presents advantages and disadvantages and comparative cost figures; gives examples of different types of year-round schools; and includes a capsule review of 20 district programs now in operation as well as six comprehensive case studies of programs under way.

National School Public Relations Association. "Year-Round Schools Can Reduce Costs," EDUCATION U. S. A., October 30, 1972, p. 49.

New evidence which comes from an extended school year experiment conducted last year in Dale City, Virginia, reveals that the year-round school may be a money-saver after all. A cost analysis of the experiment, made by Education Turnkey Systems of Washington, D. C., showed that the per-pupil cost of operating a middle school, year round, was 9.6% less than it would have been under a traditional nine-month calendar. The actual per-pupil expense, including facilities, was $1,033, compared with a projected nine-month expense of $1,143. The savings was realized under the 45-15 Plan of Prince William County, Virginia, where students spend nine weeks (45 days) in school, four times a year, with three-week (15 days) vacations in between.

Although it seems that the 45-15 plan could always cut costs if schools were well managed, it may be impossible to duplicate the 9.6% savings elsewhere. The reason for this is that when the Prince William Schools extended teachers' contracts from 193 to 241 days, the teachers lost 13 nonteaching days for in-service training and record keeping. Therefore, the teachers ended up teaching 33% more pupils for a 25% salary increase--which accounted for 3% of the 9.6% savings. The Turnkey study warns that this savings may not continue for two reasons: (1) teachers need time for nonteaching activities and (2) teacher organizations will probably press for salary increases proportionate to the increased number of pupils being taught.

However, the remaining 6.6% savings need not disappear if administrators are cautious, Turnkey analysts say. The 6.6% savings was achieved as follows: 1.9% by more extensive use of principals and other staff, .5% by more efficient use of equipment, and 4.2% on school buildings. Administrators are warned that they should not allow any excess or "slack in facilities" to occur or the savings will not be realized. Three elementary schools, as well as Dale City's middle schools, saved 5.3%, the Turnkey report states. This was almost the same savings realized by Valley View Elementary School District in Lockport, Illinois, which pioneered the 45-15 plan in 1970.

The 45-15 plan is strongly supported by the students, parents and staff involved in it, according to a survey conducted by Ned S. Hubbell & Associates, or Port Huron, Michigan. The 45-15 plan "does have the potential for producing long-range savings" if accompanied by "better school management," the Turnkey report states. Further, it estimates that a countywide 45-15 plan could save the district $18 million in construction costs over a 10-year period.

Schoenfeld, Clarence A. and Schmitz, Neil. YEAR-ROUND EDUCATION. Madison, Wisconsin: Dembar Educational Research Services, Inc., 1964, 111 p.

In the section entitled, "The All-Year Elementary and Secondary School," the point is made that it is hazardous to generalize about the all-year school. Each type, even each sub-type, has its peculiar advantages and disadvantages, particularly in terms of geographic setting and milieu.

In the area of economy, there is little question that the extended summer session and extended semester versions will add to a school's operating budget without any accompanying saving in capital investment. The quarter systems, however, have the capability to produce economies, but only in the presence of enrollment controls. Both patterns increase the utilization of school facilities.

In terms of educational goals, the quarter systems and the extended semester emphasize acceleration for better or worse. The extended summer session offers specialized enrichment and review, in addition to acceleration. Again both patterns tend to place faculty on a 12-month basis.

The consecutive quarter system, the Newark experience suggests, has a hidden ability to combat juvenile delinquency. The Nashville Experiment suggests this pattern may have drawbacks in the South unless schools are air-conditioned.

The observation of Newark's Brinkerhoff that "the holding power of the all-year school is greater" may have relevance to the perplexing dropout rate.

On one aspect of year-round schooling it seems safe to generalize; namely, student and faculty performance. Most available evidence suggests that summer study and teaching are not necessarily debilitating. Instead, the opposite can be true.

In conclusion, it is stated that, given an over-riding objective, an American community can find a school pattern that will meet its needs. But no one pattern will solve all problems.

Thomas, Steven C. "Valley View's 45-15 Year-Round School." TODAY'S EDUCATION 60:42-43, November 1971.

A bold innovation has taken place in Romeoville, Illinois--a new, fast-growing community located 35 miles southwest of Chicago. Valley View School District 96 now serves the educational needs of 7,000 students in grades K-8 with its special version of a continuous, year-round school, known as the Valley View 45-15 Plan.

Background - What causes a school and a community to take such a step away from tradition? In 1953, five one-room schoolhouses with a total enrollment of 89 pupils combined to form Valley View School District 96. Today enrollments have reached 7,000, and half of that explosive growth has occurred in the past five years. In 1968 the citizens of that community started actively studying the problems facing them. In 1970 mandatory kindergarten legislation was to go into effect, causing enrollments to spiral even more. Problems were further compounded by the fact that the district had reached its bonding power limit and could not legally raise taxes again to build new classrooms. The board of education had three alternatives: (1) it could institute double shifts; (2) it could place 50-60 pupils in each classroom; (3) it could set up some type of compulsory year-round school system that would make better use of existing facilities. The board and the community decided that the third alternative offered the best answer. After two years of study, the Valley View Plan was launched on June 30, 1970. Under this plan, students are scheduled into four groups on a geographic basis. The groups are staggered so that only three groups attend school at once, thus reducing the enrollment at any particular time by one-fourth. The four groups always stay in the same order of rotation, and each group attends school 180 days a year. All students have traditional holidays, and the school is closed for 10 days in the summer for repairs and calendar adjustments. The students attend classes for 9 consecutive weeks, then have a 3-week vacation, thus the name 45-15.

Advantages - For every 30 classrooms in the district, there is the space equivalence of 40 classrooms. Students have adjusted well to the new schedule. Shorter vacations mean fewer adjustment problems when students return to class. The transportation system has been streamlined by scheduling pupils for school in neighborhood groups. The same number of buses carry more pupils more miles, even though the enrollment has increased. Teachers now have an option of how long they want to work each year. There are five basic contracts available for them--180 days, 210 days, 225 days, 240 days, and 270 days (the last is possible for an individual only every other year, as it is a 14-month contract).

Disadvantages - Having one group of students in class for nine weeks is undesirable from several standpoints. Many teachers have a new group of pupils every nine weeks. At the junior high level, students may have as many as 24 different teachers during the year. Teachers may find it difficult to provide the extra training some students need beyond the nine-week period. The student-teacher relationship may be more impersonal. Teacher fatigue could also be a problem. Despite its shortcomings, Valley View is an example of a workable year-round school plan--complete with problems to be solved--that may indicate a future trend in education.

U. S. Department of Health, Education, and Welfare. National Center for Educational Communication. YEAR-ROUND SCHOOLS - THE 45-15 PLAN (PREP REPORT No. 27). Washington, D. C.: Government Printing Office, 1972.

The problem of overcrowding in our schools persists, despite a decrease in the number of school-age children nationwide. The ideal solution--new schools built and staffed to suit the particular needs of the community--remains out of reach for most communities. Other more realistic solutions--adaptation of a double shift or split-shift; leasing of space in area churches or other community facilities; application to the state building commission for special assistance; allowing class sizes to continue to increase, but adding a few new faculty; or a combination of these--are only temporary measures. A new alternative--the year-round school--is now being adopted by a handful of schools across the country and appears to be the most viable as well as significant solution to the overcrowding problem at the present time.

The Valley View School District #96, Lockport, Illinois, developed and eventually adopted the 45-15 Year-Round School Plan in June 1970. Their experience with the plan, both in developing and working with the community for its adaptation, gives valuable insights to other school districts that may be grappling with the overcrowded classroom problem.

What Is The 45-15 Plan?

The 45-15 Continuous School Year Plan has schools open all year long. It calls for each student to attend school 45 schooldays and then have a 15-schoolday vacation. By staggering the entrance dates for about one-fourth of the students every 15 schooldays, the first group to enter completes its vacation the day the fourth group enrolls. Fifteen schooldays later, when the first group returns, the second group commences its vacation, and so on throughout the year. Thus only three-fourths of the entire student body is in school while the other one-fourth is on vacation. Through this plan the number of classrooms available is automatically increased by 33 percent without any additional construction. The schools are in continuous operation except for Saturdays, Sundays, legal holidays, a week at Christmas and Easter, and about 2 weeks in July for major maintenance and attendance adjustments in preparation for the succeeding year's calendar.

Scheduling

. All children from a family are to be in the same attendance group.
. Pupils within walking distance of a school should attend that school.
. Pupils should remain at one school for a year.
. Class size should vary no more than in previous years.
. The transportation policy should remain basically the same for the first year.
. Elective size should vary no more than in previous years.

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Response To Community Questions

. What effect does the program have on learning opportunities?

The child is evaluated every 45 schooldays. If it is found desirable for him to repeat his school work, the school, in consultation with the parents, will enroll the child in the next scheduled 45-day school period. As a result the child does not lose a whole year in his academic and social development.

. How will vacations be affected?

All seasons of the year become vacation seasons. Greater variety in climates and areas is available because the summer vacation congestion is no longer a problem.

. What of the working mother?

If the mother usually employs someone during the summer to look after her child, the 45-15 Plan will simply mean she will employ someone for shorter, more frequent periods. If she normally takes leave from her job in the summer, she would now arrange to take only 3 weeks at a time four times a year.

Conclusions and Recommendations

Posttest and evaluative data are not yet available on the Valley View 45-15 Plan. However, baseline information shows:

1. Immediate savings (up to 5 percent per pupil) can be gained under these conditions:
   - Enrollment is rising rapidly.
   - Debt retirement is high per pupil.
2. Most teachers will take a year-long contract, given the opportunity.
3. The move to a year-round operation wins strong support from economy-minded taxpayer and watchdog groups.
4. Any school system can move to a year-round school operation if it (a) wins community acceptance of the plan, (b) involves the professional staff with all the ramifications of the operation, and (c) develops a model or design that does not penalize certain families.

The University of the State of New York/The State Education Department. EXTENDED SCHOOL YEAR DESIGNS: AN INTRODUCTION TO PLANS FOR RESCHEDULING THE SCHOOL YEAR. Albany, New York: The Department, 1966, 118 p.

This handbook presents a number of extended school year designs and cost analyses for each. The following significant points are made: (1) extended school year designs can lead to economies due to a reduction in total school enrollments (the need to house and educate fewer students releases classrooms and teachers and thereby makes possible a potential saving of millions of dollars in state and local tax revenues); (2) lengthened school year programs can give a community a much broader use of professionally trained teachers; (3) school reorganizational plans carry with them the prospect of a major retooling of the curriculum.

Definitions of Various Plans:

. Continuous Progress Plan - The goal of this extended year program is to save one elementary school year out of six or seven without concern with terms. Pupils work through sequential phases of the curriculum without excessive time breaks. For example, in a 210-day school year, many kindergarten pupils will complete a year's work at the end of 180 days and then will devote the last 30 days of the 210-day school year to first grade work. In the second year, they need spend only 150 days more to complete a first grade program. They will, therefore, have 60 days that year to spend on second grade work. The Continuous Elementary School Year Plan will provide a school system with additional classrooms at the end of a six-year adjustment period, if the pupils leaving level six can be provided for in grade 7. The entire elementary school will benefit from the release of the classrooms formerly occupied by sixth graders, but this plan presupposes that the secondary school will be able to house an additional number of students equivalent to an extra class or grade for the next six years.

. Trimester Plan - This plan calls for the division of a longer school year into three terms or trimesters. With a small increase in the length of the daily class periods, two trimesters provide the same amount of instructional time as two regular semesters. A course is completed in two trimesters; new courses begin in the following trimester. A three-year trimester plan is one which begins with four grades and reduces to three levels after the fourth trimester, saving one year in four. There are also four- and five-year trimester plans. A trimester can be as long as the school system wants to make it. The two deciding factors are the length of the school year and the length of the class period. The recommended trimester program calls for a 70-day trimester and a 210-day year.

. Quadrimester Plan - This plan is based upon the division of a longer school year into four equal quarters or quadrimesters. Average or above-average learners can complete the equivalent of a normal 180-day course in three quadrimesters. This is done through a lengthening of class periods to equalize instructional time. The quadrimester program differs

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The University of the State of New York/The State Education Department.
EXTENDED SCHOOL YEAR DESIGNS... (Cont.)

from most four quarter programs in that pupils are not given the choice of working through three quarters and then having an extended vacation. Each student is expected to continue through school for the full 204 to 220 days. If he completes a course at the end of the second or third quadrimester, the school must be prepared to offer new courses which will meet his educational needs.

. The Modified Summer Plan - This plan attempts to accelerate pupils through secondary school by offering more than remedial, make-up, or enrichment courses. Students who take part in the proposed programs do so with the understanding that they will take new academic subjects. The courses selected at this time will be designed for the purpose of allowing them ultimately to do four to six years of work in one calendar year less.

. Extended K to 12 Plan - Predicated upon the premise that every student can benefit from more educational opportunities with little, if any, extra cost to the community, this proposal would allow all the pupils in a school system to engage in activities which are continuous in nature for an extra month. This plan is based on the concept of saving one year out of thirteen.

. The Split Trimester - The split trimester plan is a compromise between the regular trimester program and the traditional summer school. It is an attempt to provide a program of continuous education beyond the limits of the regular school year. The split trimester plan differs from the regular trimester in that it introduces voluntary student participation in an extended school year program. The new lengthened school year is divided into three equal segments varying from 72 to 75 days. The third trimester is divided into a 3A and 3B session. A voluntary split trimester design saves one year out of six.

An appendix, which shows projected savings in classrooms for the State of New York based on the adoption of an extended school year program, concludes this handbook.

The University of the State of New York/The State Education Department. THE IMPACT OF A RESCHEDULED SCHOOL YEAR. Albany, New York: The Department, 1970, 158 p.

Six years ago the New York State Education Department embarked upon "experimentation to discover the educational, social and other impacts of rescheduling the school year from the present thirteen year system to a twelve or eleven year system but still providing as many instructional hours as are now available under the present thirteen year system."

In the succeeding years a number of designs for an extended school year were developed. Five public schools and two special schools tested four of the designs incorporating components capable of answering key questions about all designs. In addition a number of boards of education explored the potential of the designs for their schools. They worked with the Department's consultant, their staff, and communities. Many of them have plans ready for implementation when legislative action is taken. An inventory of pertinent existing evidence was made, including extended school calendars in other countries.

In the final year of experimentation a new series of designs was developed, known as the Continuous Learning Year Cycling Plan. In general, the cycling plan permits year-round use of school facilities but typically has only four-fifths of the students in attendance at any one time. The new term rotation plan was created to provide an immediate answer to the problem of dollars and space. One cycling plan calendar could lead to a gradual acceleration, but this aspect is not recommended. Some children need additional learning time; therefore, the report suggests that the extra instructional days be devoted to the enrichment of the total program or to give slow learning children time to master basic skills. At the secondary school level the extra time sets the stage for a modified student-teacher day or week based on the time equalization principles of the multiple trails plan.

In the course of the experimentation a number of crucial questions were raised. The answers appear below.

. Can children take a longer school year?

Thousands of children have worked through lengthened school year programs in New York and elsewhere without showing any evidence that the extra exposure to learning has hurt them.*

* NOTE: Many of the more recent year-round school plans, such as Valley View's 45-15 Plan, do not call for any additional days of schooling per year. Children still go 180 days a year, but their vacations are spaced throughout the year.

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The University of the State of New/The State Education Department. THE IMPACT OF A RESCHEDULED SCHOOL YEAR. (Cont.)

. Does all learning stop with the onset of hot weather?

Research studies show that children learn as well in July and August as they do during the regular school year.

. Can schools operate in the summer without air conditioning?

Since homes, public buildings, and cars are usually air conditioned, it is only logical to extend air conditioning to schools which tend to get warm in May, June, and September as well as in July and August. All existing schools can be readily air conditioned through the expenditure of a small fraction of the potential dollar savings accruing to local school districts by rescheduling the school year.

. Do children need the summer to recuperate after a long period of schooling?

Children need a rest or change of pace several times a year, not just once. Several lengthened school year designs provide such breaks at the end of 8, 9, or 10 weeks. These 2 or 3 week vacations should suffice since there is no evidence that children or teachers require 10 to 12 weeks to recuperate.

. How will year-round schooling affect family vacations?

Recent studies show a change in vacation patterns. Department of Labor statistics show an ever-increasing number of employees receive 3, 4, or 5 weeks of vacation a year. However, many of them are limited to a vacation in the summer, because, traditionally, that is the only time the children are not in school. Many families would prefer a winter skiing trip or a vacation in sunny climes during the cold winter months.

The University of the State of New York/The State Education Department. SETTING THE STAGE FOR LENGTHENED SCHOOL YEAR PROGRAMS--A SPECIAL REPORT PREPARED FOR THE GOVERNOR AND THE LEGISLATURE OF THE STATE OF NEW YORK. Albany, New York: The Department, March 1968, 113 p.

In 1963 The New York State Education Department took steps to test the feasibility of rescheduling the school year, to test theories related to the concept, and hopefully set the stage for widespread adoption of year-round schools throughout the State. The program was given wholehearted support by the then New York State Commissioner of Education, and later the U. S. Commissioner of Education, the late James E. Allen.

Four school systems launched experimental programs in the school systems. The programs varied from system to system to meet local needs and interests, but they had in common the basic notion that extending the school year into some form of year-round school was feasible, desirable, and in the long run, perhaps economical. The various programs had varied school calendar configurations and contained within them cross sections of elementary and secondary school pupils, various ability groups, and varied kinds of communities--suburban, city, and rural.

Among the basic considerations researched in the programs were: (1) the notion that children can learn as well during the summer as they can during the regular school year; (2) that there would be less loss of learning due to shorter vacations; (3) that the flow of students through the schools could be, in some cases, accelerated or in others enriched; and (4) that, as a result of acceleration through school, there could be better use of school facilities and staffs.

One of the hopes was that this kind of "seeding" experimental programs in various areas of the state would lead to "clusters" of school systems adopting similar programs with perhaps eventual statewide, or nearly statewide, adoption.

Of special interest is the section entitled, "Areas for Consideration During the Planning Stages." This list shows areas studied in school districts which have been exploring the feasibility of extending the school year.

"Year-Round Schools: Ask Someone Who's Tried It," EDUCATION DAILY, January 7, 1972, p. 3-4.

The cardinal rule for any school system changing over to a full year program is to allow a year for planning. That's the word from the Valley View School District #96, Lockport, Illinois. They have just made the change to a year-round schedule in which three-fourths of the elementary school students attend classes at any given time, in overlapping sessions of 45 class days followed by 15 class days of vacation. The school staff has this advice for other school systems thinking of trying it:

- Establish a position of planning director, give him at least one year to do planning, and provide a budget of $3 to $5 per student.
- Answer all questions by all people carefully and patiently, over and over.
- Prepare a calendar early and have the school board adopt it early.
- Involve the community in answering this question: "What would you do or what would you recommend for us to do to increase classroom space by one third?" Give the public the alternatives, which are: double sessions, 50 or more children in a classroom, costly building programs, or some form of year-round school.
- Involve the teachers. Year-round school will be a big change for them and yet it promises to be of great financial benefit to them. Let teachers participate in the planning and give them as much freedom as possible in selecting the length of their contracts.
- Give each principal freedom to build any type of staff schedule he chooses for his building.
- Encourage use of nongraded or individualized instruction as a means to solve student scheduling problems and to advance the cause of better education.
- Keep the public informed. Don't stop communicating. It is of vital importance to retain the confidence of the public.
- Discover the questions from different local groups that cannot be answered easily and establish an evaluation program which will answer them within practical limits.
- Seek out the person with the strongest objections, listen to him, answer his questions sincerely and honestly, but proceed with the planning according to the feeling of the most positive people.

The factor which contributed most strongly to Valley View's adoption of the year-round school was the tremendous growth in pupil population, from 89 pupils in 1953, when the district was rural, to 6,000 pupils in 1970, when the district became industrial. By the mid-1960's the district had exhausted its taxing possibility to finance construction bonds.

The 45-15 plan was adopted as a way around one common objection to a year-round calendar--that some families would have to take their vacation in the winter. This is the case in other communities where the schools are scheduled on a quarterly basis. Under the Valley View design, children attend school for 45 days, and then they get a vacation of 15 school days, or 3 weeks. This means that families can take their vacations during any season they choose, because the children will have three weeks off during all four seasons. Children in the same family are on the same schedule.

Research & Information Center
State Department of Public Instruction
Raleigh, North Carolina 27602

December 1972

SELECTED ERIC DOCUMENTS

ON

THE YEAR-ROUND SCHOOL

(Note: These ERIC documents can be read in full or ordered on microfiche from the Research & Information Center; State Department of Public Instruction; Room 581, Education Building; Raleigh, N. C. 27602.)

AIRCONDITIONING FOR SCHOOLS. A REPORT. New York, New York: Educational Facilities Labs., Inc., 1971, 14 p. (ED 050 469)

This pamphlet advocates air conditioning to improve educational productivity. The physiological effects of thermal environment are explained and educational experiments cited to substantiate the benefits of air conditioning in promoting learning. The necessity and economy of air conditioning for schools with large open-space learning areas and for those with year-round usage is emphasized. Air conditioning as part of a school's modernization process is also discussed.

Alam, Sami J. THE FOUR-QUARTER PLAN AND ITS FEASIBILITY FOR THE PORT HURON AREA SCHOOL DISTRICT. A RESEARCH STUDY. Lansing, Michigan: Michigan State Department of Education, 1970, 275 p. (ED 046 105)

This study examines the economic, educational, and physical feasibility of the Four-Quarter Plan with an assigned vacation. The choice of this plan resulted from the examination of research and literature on different forms and uses of the Four-Quarter Plan. It was concluded that the plan would be feasible if the following conditions were met: (1) Curriculum revision must accompany the move to the proposed plan; (2) Content within each discipline in the program of instruction must be reevaluated; (3) Business and industry, as well as teaching and operational staffs of the school district, should support the plan; and (4) The program must be adequately financed. Three surveys were conducted to assess the attitudes of the community, the business and industrial representatives, and the certified staff to the plan. The surveys show that (1) The business and industrial community was evenly divided in approval or rejection, while (2) Teachers were divided 39% in favor, 35% opposed, and 26% undecided. An annotated bibliography is included.

A REVIEW OF THE STATUS AND PROJECTIONS FOR THE DADE COUNTY QUINMESTER EXTENDED SCHOOL YEAR PROGRAM. Miami, Florida: Dade County Public Schools, 1971, 48 p. (ED 058 666)

This document summarizes the background of the Dade County Quinmester Extended School Year Program involving five high schools in a pilot project. The program resulted from a study of alternative plant utilization plans for the most efficient use of school facilities to reduce the need for capital expenditure during the next five years. Discussed are: (1) Fiscal implications, including an analysis of projected costs; (2) Evaluation plan; (3) Plans to review administrative procedures and practices; and (4) Specific recommendations concerning the future development of the Quinmester Program. The appendixes contain questionnaires sent to the business and the academic communities. Related documents are EA 004 047 and EA 004 051.

Bauman, W. Scott. THE FLEXIBLE SYSTEM, AN ECONOMIC ANALYSIS OF ADVANTAGES OF THE QUARTERLY CALENDAR IN PUBLIC SCHOOLS. Toledo, Ohio: Toledo University, 1966, 46 p. (ED 011 688)

The author submits that problems of finance and student capacity necessitate increased flexibility in school programs. A possible solution is presented--scheduling the school year on a quarter system (or the flexible system)--under which only 75 percent of the students would be in school at the same time and the school year would be extended to 11 months. This system would increase teacher effectiveness by giving teachers professional work 11 months a year and substantially increasing their salaries. Such a program would also give students greater flexibility in program planning. Accelerated and decelerated programs could be effected more easily. Two possible flexible systems are proposed--(1) The pupil rotation plan, and (2) The constant quarter plan, both of which are detailed in the report.

Bauman, W. Scott. THE SCHOOL CALENDAR DILEMMA--A SOLUTION FOR THE APPROACHING CRISIS. Eugene, Oregon: Oregon University, 1969, 48 p. (ED 033 436)

The rising costs of education could be reduced by substituting a four-quarter rotational school calendar for the traditional school calendar. Under this system, each student would attend three continuous quarters and have the fourth quarter off. One-fourth of the students would thus be on vacation each quarter, and one-fourth less teachers would be required. However, teacher salaries would rise to compensate for the 12-month contracts. The need for physical facilities would fall proportionately, providing an additional source of savings which would counteract the taxpayer rebellion that has manifested itself in reduced school revenues. These savings could be applied toward acquiring instructional materials for individualized instruction. Some social problems caused by inactive youth would be reduced since fewer would be on vacation at one time. Economic efficiency would be enhanced if employers could depend on student labor year around.

Boxer, Karen; and Others. EVALUATION REPORT: 1971 SUMMER QUINMESTER PROGRAM. Miami, Florida: Dade County Public Schools, 1971, 57 p. (ED 058 667)

The primary topic of this evaluation report is the summer quinmester that extended from June 14 to August 16, 1971. The report also explores the concept of the extended school year program through questionnaire responses from parents, pupils, teachers, administrators, the business and industrial community, the educational community, and other community agencies and citizens. Discussed at some length is the general feasibility of the quinmester program. Related documents are EA 004 046 and EA 004 051.

Cole, Wilma. THE YEAR ROUND SCHOOL. Cleveland, Ohio: Paper presented at National Association of Elementary School Principals Annual Meeting. 1971, 8p. (ED 050 455)

This address describes how one school district overcame the problems of too many students for the available classroom space and of insufficient funds to provide additional classrooms. In one school a year-round program for students in grades one through six was proposed and supported by parents and teachers. A school calendar was established that required students to attend school during four 9-week sessions and provided a 3-week vacation after each 9-week session. Teachers and other school personnel were allowed one day following each session to prepare for the next cycle of students. The calendar also observed the same holidays and vacations, September-May, that were observed by all other schools in the district. Some of the problems encountered in the program since its inception in July 1969 and the solutions thereto are presented and discussed.

Cuddy, Edward H. THE YEAR-ROUND SCHOOL OR THE RESCHEDULED SCHOOL YEAR. Indianapolis, Indiana: Warren Township Independent School District. 1969, 119 p. (ED 041 364)

This indepth study examines literature on the concept of the year round school, the experiences of those who have tried this approach to education, and the recent trends in this direction. Guidelines used in developing the study were (1) past or present experiences with the year round school, (2) Format of present year round schools, (3) Degree to which year round schools are accepted throughout the United States, and (4) Major advantages and disadvantages of the year round school. Included are descriptions of 10 different plans for year round schools. An assessment of year round schools in general, an overall summary, and a bibliography of 59 sources. (Figures 3, 4, 13, 19, and 20 may be of poor quality in hard copy because of marginal legibility.)

EFFECTIVE INSTRUCTION: A REPORT ON THE FOUR QUARTER PLAN OF ORGANIZATION. Atlanta, Georgia: Atlanta Public Schools, Georgia. 1968, 34 p. (ED 028 544)

With the beginning of the 1968-69 school term, the Atlanta Public Schools implemented the four-quarter plan for reorganization of the secondary school curriculum. The year is divided into four quarters of approximately the same length. Pupils were compelled to attend the first three quarters of the 1968-69 term. Fourth quarter attendance is optional. Pupils choosing to attend the fourth quarter may accelerate, add enrichment courses, or take remedial work. A pupil attend the fourth quarter may choose which three of the next four quarters he wishes to attend, or may attend all four quarters. The

financing of the fourth quarter is yet to be solved but it is hoped that state aid will be received. Revision and restructuring of the curriculum is in a developmental stage which will eventually result in individualized instruction. A description of the new program and reports to parents and pupils concerning the four-quarter instructional program are contained in appendices.

Fain, James C. CURRICULUM REVISION BASED ON BEHAVIORAL OBJECTIVES FOR TWELVE-MONTH, FOUR-QUARTER SCHOOLS. FINAL REPORT. Atlanta, Georgia: Atlanta Public Schools, Georgia. 1971, 40 p. (ED 051 578)

This report concerns the development of a new, learner-oriented high school curriculum designed toward behavioral objectives, that would be feasible for 12-month, 4-quarter schools. Task forces, aided by systemwide and school-area inservice workshops, recommended the development of 506 courses in 12 subject areas and completed curriculum guides for 357 of these courses. Background information on the 12-month school; the organization, membership, and recommendations of the task forces; a bibliography; and a summary of findings from questionnaires administered to pupils, parents, teachers, and others for their reactions to the 12-month school are included.

FEASIBILITY OF RESCHEDULED SCHOOL YEAR PLANS FOR DELAWARE PUBLIC ELEMENTARY AND SECONDARY SCHOOLS. Dover, Delaware: Delaware State Department of Public Instruction. 1969, 48 p. (ED 036 886)

A study team for the Delaware Department of Public Instruction sought to discover a rescheduled school year design that could be adopted and used to increase the efficiency of staff and school facilities in Delaware. Through a search of the literature, visits to three school districts, and a conference with a nationally recognized consultant, recommendations were made. Pilot programs were suggested for selected Delaware school districts to test the feasibility of two rescheduled school year plans: (1) At 200 days for all students to give more flexibility in the instructional program and to improve pay and status for teachers; (2) at the secondary level, a voluntary summer session to increase educational opportunities for students to make up work, accelerate their progress, or broaden their studies without the expense of revising school organization and curriculum. It was recommended that pilot projects be funded in equal amounts from state, ESEA Title III, and local sources. An annotated bibliography of 91 citations is included.

FULTON COUNTY SCHOOLS FOUR QUARTER PLAN. Atlanta, Georgia: Fulton County Board of Education, 1969, 61 p. (ED 049 548)

The Fulton County Four-Quarter Plan allows a secondary school to develop a program to meet the needs of each student while allowing students to participate in course selection and class scheduling. Because of the need for a quality program during the summer months, this program has been designed to meet the standards of the total school program during all four quarters. All subject areas have been reorganized into quarter courses independent of one another. About 70 percent of the courses have been developed to be independent and taken without regard to sequence. This document lists the courses required for graduation in each of three programs and describes briefly each course.

Gove, James R. FEASIBILITY STUDY OF FULL YEAR PUBLIC SCHOOL OPERATION (VALLEY VIEW 45-15 CONTINUOUS SCHOOL YEAR PLAN) BY DETAILED ANALYSIS OF REQUIRED SCHEDULING PLANS AND ACCOMPANYING CONSEQUENCES. FINAL REPORT. Lockport, Illinois: Valley View School District 96, 1970, 262 p. (ED 048 524)

This report informs researchers, educators, and laymen about the Valley View 45-15 continuous school year plan. The report gives a background of the school district, describes the 45-15 plan in detail, analyzes its effects on school and community, and chronologically summarizes significant events that followed implementation of the plan. The plan, developed mostly by professional educators from the district, was developed out of economic necessity and not primarily as an experiment. Under the plan, students in the district spend 45 school days in school and 15 school days out of school in each of four cycles. In order to have the school in continuous operation, only one-fourth of the students are on vacation at any one time. Hence, the students are placed in four groups staggered by 15-day periods. Reprints of numerous newspaper articles discussing the plan are included. Some of these reprints may reproduce poorly.

Gove, James R. YEAR-ROUND SCHOOL: THE VALLEY VIEW 45-15 PLAN. Atlantic City, New Jersey: Speech Given Before New Jersey School Boards Association Annual Workshop, 1971, 8 p. (ED 057 438)

An assistant superintendent describes the background and economic advantages of a continuous school year plan in which students attend school for 45 class days and vacation for 15 days. Students are divided into four rotating shifts -- three groups are in class while the fourth group is on vacation.

INDEPTH STUDY FOR FREELAND COMMUNITY SCHOOLS. TITLE OF PROPOSED STUDY "STAY" (START TEACHING ALL YEAR). STUDY CONDUCTED DURING THE 1969-1970 SCHOOL YEAR. Lansing, Michigan: Freeland Community Schools, 1970, 401 p. (ED 053 438)

The "Stay" program is a feasibility study of a proposed trimester year-round school program requiring that two-thirds of the students be in attendance at any one time. This study is intended as a technical guide for those school administrators and board members who plan to experiment with, or those who have installed, year-round programs. The report contains curriculum outlines by course title for each grade level K-12, with objectives, content, and evaluation measures. Other material includes information about teacher salaries, program schedules, and vacations; descriptions of maintenance and auxiliary staff jobs; demographic characteristics of the district population; and estimated expenditures of the proposed program.

McKague, Terence R.; Penner, Glen H. RESCHEDULING THE SCHOOL YEAR. THE REPORT OF A FEASIBILITY STUDY FOR SASKATOON PUBLIC SCHOOLS. Regina, Saskatchewan: Saskatoon Public Schools, 1971, 229 p. (ED 050 495)

This report is the result of a study to assess the feasibility of rescheduling the school year in the public schools of Saskatoon, Saskatchewan (Canada). The study directors limited their investigation to three approaches: The extended summer school, the divided year, and the rotational or cyclic. To assess the feasibility of each approach, researchers reviewed current rescheduled school year programs, and collected facts, opinions, and reactions from Saskatoon parents, teachers, and students. Conclusions were then drawn and recommendations made. Appendixes include rescheduled school year plans from other districts, questionnaires used in the study, and a bibliography.

MT. SEQUOYAH NATIONAL SEMINAR ON YEAR-ROUND EDUCATION. Fayetteville, Arkansas: Arkansas School Study Council, 1969, 66 p. (ED 040 498)

Based on the assumption that education is an ongoing process, this first national seminar was instituted to serve as a clearing-house of information on year-round education. The seminar brought together some of the Nation's most creative leaders in education to consider year-round schools as a means of improving the quality of education without corresponding increases in costs. Excerpts of 13 speeches delivered at the conference, a general summary of speeches, and lists of seminar consultants and participants are included.

9+ THE YEAR-ROUND SCHOOL. Washington, D. C.: American Association of School Administrators, 1970, 36 p. (ED 040 497)

The 9-month school year with a 3-month summer vacation had its origin in our earlier agrarian life. Today's teacher shortages, overcrowded schools, and pressures to learn demand extensions of the school year. This publication analyzes five programs: (1) A staggered-vacation school year for all, (2) A full 48-week school year for all, (3) A voluntary summer program, (4) A summer studies program for professional personnel, and (5) The multiple trails plan based on time modules. A brief description of the Fulton County (Georgia) Four-Quarter Plan is provided, along with major references to year-round college programs. An extensive bibliography is also included.

Perry, Ione L. POST-CONFERENCE REPORT: EXTENDED SCHOOL YEAR CONFERENCE. Tallahassee, Florida: Florida State Department of Education, 1969, 71 p. (ED 044 811)

Rising school enrollments, construction costs, and the search for excellence in education have revived interest in the extended school year. The purpose of this conference was to enable Florida educators and citizens to investigate various designs for rescheduling the school year in terms of curriculum, flexible staff organization, and school facilities. The report is comprised of papers presented by consultants actively involved in the planning and operation of experimental year-round programs across the country. A selected bibliography is included.

Petterson, Carl Emmanuel. THE EXTENDED SCHOOL YEAR IN THE STATE OF UTAH. Salt Lake City, Utah: Utah State Board of Education, 1966, 154 p. (ED 022 267)

This study examines the extended school year and summer school program supported by the State of Utah during the summer of 1965. Facts, statistics, opinions, and other information enable educators and legislators to make informed decisions concerning the future of summer school programs in Utah. Information for the study was obtained from three major sources: (1) An oral interview with each district superintendent, (2) A personal visit to selected schools, and (3) Questionnaires distributed to a random sample of parents, students, and teachers. The results of the study led to five recommendations: (1) The summer program should be continued and expanded, (2) Increased communication and cooperation is needed between the community and the schools in the formulation of summer programs, (3) Class size of the summer program should be investigated further, (4) Student transportation should be improved, and (5) Use should be made of any industrial, historical, or recreational facilities which the community has to offer.

Rogge, William M. PLANNING A YEAR-ROUND SCHOOL OPERATION (A CASE-STUDY OF THE VALLEY VIEW SCHOOL DISTRICT 45-15 PLAN). FINAL REPORT. Lockport, Illinois: Valley View School District 96, 1971, 151 p. (ED 047 189)

The year-round school operation of the Valley View School District is described from its planning stages through the implementation of the plans. A "45-15 Plan" provides for each pupil forty-five days of instruction and fifteen equivalent days of vacation. With the cycle repeated four times each year, one-fourth of the pupils are on vacation at any one time. The experience has shown that there are three main problems to be solved in undertaking such a plan. These are: student scheduling, teacher scheduling, and winning community support. The most difficult of these is student scheduling, but this problem can be eased considerably by the use of individualized instruction and by having as large an enrollment as possible in each school. Attached are appendices including instruments used in the study and questionnaires used among concerned participants.

SETTING THE STAGE FOR LENGTHENED SCHOOL YEAR PROGRAMS--A SPECIAL REPORT PREPARED FOR THE GOVERNOR AND THE LEGISLATURE OF THE STATE OF NEW YORK. Albany, New York: New York State Education Department, 1968, 119 p. (ED 020 578)

This report to the New York Legislature describes several extended school year designs which have been created to help attain the goals of economy and increased educational opportunity--(1) the continuous progress design, (2) the modified summer school, (3) the trimester design, (4) the quadrimester design, (5) the extended K to 12 plan, (6) the multiple trails plan. The report supplements earlier publications and presents specific findings, conclusions, and recommendations which may become the basis for new extended school year programs.

Thomas, George Isaiah. EXTENDED SCHOOL YEAR DESIGNS--AN INTRODUCTION TO NEW PLANS OF SCHOOL ORGANIZATION WHICH CAN RESULT IN FINANCIAL ECONOMIES AND PROVIDE MORE EDUCATION FOR ALL PUPILS. Albany, New York: New York State Education Department, 1966, 138 p. (ED 020 587)

This report explores plans of elementary and secondary school organization based upon the lengthening of the school year to reduce by one or more years the total period of schooling. Practical information is presented concerning (1) the continuous school year plan, (2) the trimester plan, (3) the quadrimester plan, (4) the modified summer school plan, and (5) the extended K to 12 plan. The effects of each plan upon students, teachers, school facilities, school finance, and curriculum are discussed. Long-run financial benefits are expected to accrue from savings in salaries, transportation costs, capital outlay, debt service, and building operation costs while revenues should increase from relatively larger tax rolls. Potential educational advantages arise from (1) reduction in the number of dropouts, (2) smaller class size, (3) more instructional time to meet the basic needs of each child without additional cost, (4) more effective utilization of special facilities, (5) reduction of the gap between teacher demand and teacher supply, and (6) increased teacher quality resulting from the ability to pay higher salaries and thus to compete effectively for qualified individuals. Required curriculum adjustments to make such plans effective are discussed in detail.

Thomas, George Isaiah. IT'S TIME TO RESCHEDULE THE SCHOOL YEAR. (Paper Presented at the Annual Meeting of the National School Boards Association, Miami Beach, Florida, April 12-15, 1969) 19 p. (ED 029 394)

While most administrators are primarily interested in the economies offered by the extended school year, it is the opportunities for increasing educational quality which should receive primary attention. The knowledge explosion in the past 70 years dictates this focus. There are four basic ways of rescheduling the school year: (1) the staggered quarter plan and its many variations, in which the schools operate year-round with vacations spread throughout the year; (2) the extended school year (204-212 days), with economies arising from student acceleration; (3) the summer school programs for remedial, makeup, or enrichment work; and (4) the multiple trails design. The multiple trails design is the most flexible of the plans since it does not rely on term rotation or acceleration to achieve desired goals and it allows educators to be innovative. It allows for individualized programs, acceleration, and enrichment, and gives teachers time for individual development. Computers programed with many rescheduled school years will soon be ready to provide individual school districts with programs which will best fit their needs and conditions. Vacations are becoming year-round phenomena and should not hinder year-round schools as they did in the past.

Torge, Herman. THE YEAR-ROUND SCHOOL. (Thesis Submitted in Partial Fulfillment of Requirements for Master of Arts Degree at Miami University, Oxford, Ohio) Middletown, Ohio: Southwestern Ohio Educational Research Council, Inc., 1968, 99 p. (ED 057 465)

This study consists of a review of the literature, a discussion of some of the vital questions concerning the year-round school, and a bibliography. Discussed are (1) quarter schedules of various types and their applications to school calendars, (2) transitions to quarter schedules from conventional schedules, (3) teacher and staff assignments, (4) building capacities, and (5) curriculum and scheduling. These issues and presented and discussed, and various methods of solving problems are provided as a guide for those districts planning to conduct studies of the year-round school, necessarily within the context of their own philosophies and needs.

Varner, Sherrell E. THE RESCHEDULED SCHOOL YEAR. Washington, D. C.: National Education Association, 1968, 39 p. (ED 032 625)

The extended school year is based on the needs to economize, to improve teacher status, to deal with the teacher shortage, to improve and enrich education for all pupils, to achieve pupil acceleration, and to keep youth busy and off the streets during the summer months. In spite of these claimed advantages, experimentation and adoption of extended school year plans have not been widespread. After a discussion of the traditional summer school plan, this report summarizes the operations, experiments, and studies which have been conducted on each of the following plans: (1) rotating four-quarter, (2) continuous four-quarter, (3) extended school year, (4) continuous school year or continuous progress, (5) multiple trails, (6) modified summer school, (7) trimester, (8) quadrimester, and (9) extended K-12. A bibliography containing 93 items is appended.

Wehmhoefer, Roy A. THE TWELVE MONTH SCHOOL YEAR, A STUDY OF THE ADVANTAGES AND DISADVANTAGES OF THE FOUR QUARTER SYSTEM. Chicago, Illinois: Cook County Public Schools, 1968, 15 p. (ED 022 252)

The literature on the staggered four quarter system is reviewed, and the advantages and disadvantages of the system are discussed.

White, J. B. and others. YEAR-ROUND SCHOOLS FOR POLK COUNTY, FLORIDA, A FEASIBILITY STUDY. Gainesville, Florida: Florida Educational Research and Development Council, 1966, 75 p. (ED 011 690)

To evaluate year-round schools, Polk County, Florida, Schools requested a study of the literature on year-round operation of public schools and a nationwide survey of state departments of education. New York, California, and Florida were found to operate some schools on a year-round basis. Three of seven outlined plans were selected for special analysis--regular year plus summer attendance, staggered four quarters, and the trimester plan. Under the quarter system, a Polk County elementary school would require a minimum of 540 pupils to operate at lower cost than the present system allows because instructional salaries amount to 80 percent of all current educational expenses in Polk County. Under the trimester system, the elementary school would require a minimum of 432 pupils to operate with a lower total instructional salaries cost. Junior and senior high schools would require more teachers and higher salaries for both the quarter and trimester systems because they must offer a wide range of subjects requiring a larger proportionate teaching staff than elementary schools. Other cost differentials include administration, plant operation, auxiliary charges, fixed charges, and capital outlay. Special problems include administration, plant maintenance, teacher recruitment and retention, curriculum development, pupil reassignment, and public relations. Public reaction from 4,210 respondents (2,477 parents, 487 teachers, and 1,246 students) favored the regular school year plus summer program operated without cost to parents but with attendance compulsory for students not promoted and voluntary for others. An eighth plan providing 210 days of continuous study for all pupils is recommended as the best means of increasing the educational quality level and obtaining the greatest amount of educational return per dollar invested in the public schools.

Whitney, Howard and Piele, Philip, Comps. ANNOTATED BIBLIOGRAPHY ON YEAR-ROUND SCHOOL PROGRAMS. Eugene, Oregon: ERIC Clearinghouse on Educational Administration, 1968, 10 p. (ED 023 199)

This annotated bibliography is a selected listing of 11 books and pamphlets, three dissertations, and 31 articles on year-round school programs published since 1962. The documents listed explore the effects on cost and educational quality of (1) staggered quarter plans, (2) quarter system plans, (3) staggered trimester plans, (4) split trimester plans, (5) trimester system plans, (6) extended K to 12 plans, and (7) summer school plans, as well as give suggestions for implementing such plans.

Witherspoon, Ralph L. EFFECT OF TRIMESTER SCHOOL OPERATION ON THE ACHIEVEMENT AND ADJUSTMENT OF KINDERGARTEN AND FIRST THROUGH THIRD GRADE CHILDREN. FINAL REPORT. Tallahassee, Florida: Florida State University, 1968, 37 p. (ED 020 003)

At the Florida State University School, a longitudinal study attempted to find out if kindergarten through third grade children who attended the extended school year of the trimester system showed significant differences in achievement and adjustment as compared with children of a similar mean IQ who attended only during the regular school year. The urban area subjects had these attendance patterns, (1) 38 children attended for three summers, (2) 38 for no summers, (3) 44 for one summer, and (4) 43 for two summers. First, second, and third grade achievement was determined by the Metropolitan Achievement Test and the Developmental Reading Test. Adjustment was evaluated by the Haggerty-Olson-Wickman behavior rating schedules, which used teachers' ratings, and the California Test of Personality. All tests were given each October and May for a three-year period. The Science Research Associates Mental Abilities Test was given to all subjects before mid-October of the first year. Analysis of variance of the data permitted results to be adjusted in terms of variation due to intelligence. Although the evidence is inconclusive, findings indicate that extending the length of the school year has a negative effect on children's achievment and adjustment. Further trend analyses of the data collected will determine the most critical age levels in relation to school year length. A study will also be made to find out why children do or do not attend summer school. An extensive bibliography is included in this report.

YEAR-ROUND SCHOOL: IS IT FEASIBLE? Lansing, Michigan: State Department of Education, 1970, 184 p. (ED 051 559)

This study was conducted to examine the feasibility of adopting the year-round school program. The presentation includes a review of the literature, a discussion of suggested school calendars and the appropriate transfer procedures, an examination of the effects of the plan on curriculum and facilities, a summary of financial components, a description of the public relations program, and explanations of the community and professional surveys made. The appendix provides copies of news releases, questionnaires, and public relations materials.

YEAR-ROUND SCHOOL. REVISED EDITION. Harrisburg, Pennsylvania: State Department of Education, 1971, 81 p. (ED 052 540)

Pennsylvania has adopted legislation allowing the development and operation of extended and flexible school year patterns. This publication enables school district representatives to study these various patterns and to design extended school year programs organized to make optimum use of facilities and staff and student time. The educational advantages, possible problems, procedures, and activities necessary to make the year-round school operative are discussed. The appendix contains forms for administrator, teacher, student, community, and business attitude surveys suggested as guides for local school districts interested in the year-round school concept.

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APPENDIX A

PUBLIC SCHOOL LAWS

POSSIBLY AFFECTING THE OPERATION OF YEAR-ROUND SCHOOLS

General Statutes of North Carolina

Chapter 115

Elementary and Secondary Education

115-1. General and uniform system of schools. - . . . There shall be operated in every county and city administrative unit a uniform school term of nine months, without the levy of a State ad valorem tax therefor.

115-2. Administration of school system vested in State Board of Education. - The general supervision and administration of the free public school system shall be vested in the State Board of Education, to consist of the Lieutenant Governor, the State Treasurer, and 11 members appointed by the Governor, subject to confirmation by the General Assembly in joint session. . .

115-5. School System Defined. - The school system of each county and city administrative unit shall consist of twelve years of study or grades, and shall be graded on the basis of a school year of not less than nine months. . .

115-16. Controller to be administrator of fiscal affairs. - . . . In this capacity it shall be his duty, under the direction of the Board, to administer the funds provided for the operation of the schools of the State for one hundred eighty days on such standards as may be determined by the Board and always within the total funds appropriated therefor.

(b) Fiscal Affairs of Board Defined. - . . . The fiscal affairs of the Board shall also include:

(1) The preparation and administration of the State school budget, including all funds appropriated for the maintenance of the nine months' public school term.

(2) The allotment of teachers. . .

115-35. Powers and duties of county and city boards generally. - (a) To Provide an Adequate School System. - It shall be the duty of county and city boards of education to provide an adequate school system within their respective administrative units, as directed by law. . .

(e) Fixing Time of Opening and Closing Schools. - The time of opening and closing the public schools shall be fixed and determined by county and city boards of education in their respective administrative units. . .

115-36. Length of school day, school month, and school term. - (a) School Day - The length of the school day shall be determined by the several county and city boards of education for all public schools in their respective administrative units, and the minimum time for which teachers shall be employed in the schoolroom or on the grounds supervising the activities of children shall not be less than six hours: Provided, the several county and city boards of education may adopt rules and regulations allowing handicapped pupils and pupils

attending the first and second grades to attend school for a period of less than six hours. The superintendent of the several county and city boards of education, in the event of an emergency, act of God, or any other conditions requiring the termination of classes before six hours have elapsed, may suspend the operation of any school for that particular day without loss of credit to the pupil or loss of pay to the teacher.

(b) School Month. - A school month shall consist of 20 teaching days. Schools shall not be taught on Saturdays unless the needs of agriculture, or other conditions in the unit or district make it desirable that school be taught on such days. Whenever it is desirable to complete the school term of 180 days in a shorter term than nine calendar months, the board of education of any administrative unit may, in its discretion, require that school shall be taught on legal holidays, except Sundays, and in accordance with the custom and practice of such community.

(c) School Term. - There shall be operated in every school in the State a uniform school term for instructing pupils of 180 days: Provided, that the State Board of Education, or the board of education of any administrative unit with the approval of the State Board of Education, may suspend the operation of any school or schools in such units, not to exceed a period of 60 days of said term of 180 days, when in the sound judgment of the State Board of Education, or the board of education of any administrative unit with the approval of the State Board of Education, conditions justify such suspension. Provided, further, that when the operation of any school is suspended the period of suspension shall be deducted from the total of 180 days included for each school year operation, all teachers shall be entitled to normal pay for the days of school of the suspended term, not to exceed a period of 15 school days during the school term.

Full authority is hereby given to the State Board of Education during any period of emergency to order general and, if necessary, extended recesses or adjournment of the public schools in any section of the State where the planting or harvesting of crops or any emergency conditions make such action necessary.

115-59. School organization statement and allocation of instructional personnel. - (a) Each year the superintendent of each school administrative unit shall submit to the State Board of Education a statement, certified by the chairman of the board of education, showing the organization of the schools in his unit and any additional information the State Board may require. On the basis of this organization statement, and any other information considered relevant, the State Board of Education shall determine for each administrative unit the number of teachers and other instructional personnel to be included in the State budget. (b) Under rules and regulations which it promulgates, the State Board of Education will allocate teachers and instructional personnel to the various administrative units in not more than the following three categories: (i) general teachers; (ii) vocational teachers; and (iii) special education teachers.

115-129. Provisions for school buildings and equipment. - It shall be the duty of the boards of education of the several administrative school units of the State to make provisions for the nine months' school term by providing adequate school buildings equipped with suitable school furniture and apparatus . . .

115-166. Parent or guardian required to keep child in school; exceptions. - Every parent, guardian or other person in this State having charge or control of a child between the ages of seven and 16 years shall cause such child to attend school continuously for a period equal to the time which the public school to which the child is assigned shall be in session. No person shall encourage, entice or counsel any such child to be unlawfully absent from school . . .

115-176. Authority to provide for assignment and enrollment of pupils; rules and regulations. - Each county and city board of education is hereby authorized and directed to provide for the assignment to a public school of each child residing within the administrative unit who is qualified under the laws of this State for admission to a public school . . . . No child shall be enrolled in or permitted to attend any public school other than the public school to which the child has been assigned by the appropriate board of education . . .

115-182. Assignment of school buses to schools. - The superintendent of the schools of each county or city administrative unit which shall elect to operate a school bus transportation system, shall, prior to the commencement of each regular school year and subject to the approval of the county or city board of education, allocate and assign to the respective public schools within the jurisdiction of such county or city administrative unit the school buses which the county or city board shall own and direct to be operated during such school year. From time to time during such school year, subject to the directions of the county or city board of education, the superintendent may revise such allocation and assignment of school buses in accordance with the changing transportation needs and conditions at the respective schools of such county or city administrative unit, and may, pursuant to such revision, assign an additional bus or buses to a school or withdraw a bus or buses from a school in such county or city administrative unit.

115-184. Assignment of pupils to school buses. - (a) The principal of a school, to which any school bus has been assigned by the superintendent of the schools of the county or city administrative unit embracing such school, shall assign to such bus or buses the pupils and employees who may be transported to and from such school upon such bus or buses. No pupil or employee shall be permitted to ride upon any school bus to which such pupil or employee has not been so assigned by the principal, except by the express direction of the principal. . .

115-186. School bus routes. - (a) The principal of the school to which a school bus has been assigned shall, prior to the commencement of each regular school year, prepare and submit to the superintendent of the schools of the county or city administrative unit a plan for a definite route, including stops for receiving and discharging pupils, for each school bus assigned to such school so as to assure the most efficient use of such bus and the safety and convenience of the pupils assigned thereto. The superintendent shall examine such plan and may, in his discretion, obtain the advice of the State Board of Education with reference thereto. The superintendent shall make such changes in the proposed bus routes as he shall deem proper for the said purposes and, thereupon, shall approve the route. When so approved the buses shall be operated upon the route so established and not otherwise, except as provided in this subchapter. From time to time the principal may suggest changes in any such bus route as he shall deem proper for the said purposes, and the same shall be effective when approved by the superintendent of the county or city administrative unit . . .

Transportation Required for Certain Students.-This section requires provision of transportation for all students who are assigned to schools more than one and one-half miles from their homes. Swann v. Charlotte-Mecklenburg Bd. of Educ., 402 U.S. 1, 91 S. Ct. 1267, 28 L. Ed. 2d 554 (1971). Local school authorities may be required to employ bus transportation as one tool of school desegregation. Swann v. Charlotte-Mecklenburg Bd. of Educ., 402 U.S. 1, 91 S. Ct. 1267, 28L Ed. 2d 554 (1971). Cited in Morrow v. Mecklenburg County Bd. of Educ.,

195 F. Supp. 109 (W.D.N.C. 1961).

115-198. Standard course of study for each grade. - Upon the recommendation of the State Superintendent, the State Board of Education shall adopt a standard course of study for each grade in the elementary school and in the high school. In the course of study adopted by the State Board, the Board may establish a program of continuous learning based upon the individual child's need, interest, and stages of development, so that the program has a nongraded structure of organization. These courses of study shall set forth what subjects shall be taught in each grade, and outline the basal and supplementary books on each subject to be used in each grade.

The State Superintendent shall prepare a course of study for each grade of the school system which shall outline the appropriate subjects to be taught, together with directions as to the best methods of teaching them as guidance for the teachers. There shall be included in the course of study for each grade outlines and suggestions for teaching the subject of Americanism; and in one or more grades, as directed by the State Superintendent of Public Instruction, outlines for the teaching of harmful or illegal drugs including alcohol.

County and city boards of education shall require that all subjects in the course of study, except foreign languages, be taught in the English language, and any teacher or principal who shall refuse to conduct his recitations in the English language may be dismissed.

Constitution of North Carolina

Article IX

Education

Section 1. Education encouraged. Religion, morality, and knowledge being necessary to good government and the happiness of mankind, schools, libraries, and the means of education shall forever be encouraged.

Section 2. Uniform system of schools.

(1) General and uniform system: term. The General Assembly shall provide by taxation and otherwise for a general and uniform system of free public schools, which shall be maintained at least nine months in every year, and wherein equal opportunities shall be provided for all students.

(2) Local responsibility. The General Assembly may assign to units of local government such responsibility for the financial support of the free public schools as it may deem appropriate. The governing boards of units of local government with financial responsibility for public education may use local revenues to add to or supplement any public school or post-secondary school program.

Editor's Note. - The provisions of subsection (1) of this section are similar to those of Art. IX, # 2, Const. 1868, as amended by the Convention of 1875. Subsection (2) of this section corresponds to Art. IX, # 3, Const. 1868. That section, as amended in 1918,

provided that each county should be divided into districts, in which one or more public schools should be maintained at least six months in every year, and made county commissioners liable to indictment for failure to comply with the section. The cases in the following annotation were decided under Art. IX, ## 2 and 3, Const. 1868.

In General. - It was said by the court in Lane v. Stanly, 65 N.C. 153 (1871): "It will be seen that the Constitution establishes the public school system, and the General Assembly provides for it, by its own taxing power, and by the taxing power of the counties, and the State Board of Education, by the aid of school committees, manage it. It will be observed that it is to be a 'system'; it is to be 'general,' and it is to be 'uniform.' It is not to be subject to the caprices of localities, but every locality, yea, every child, is to have the same advantage and be subject to the same rules and regulations."

The requirement of this section of the Constitution, that the public school system shall be uniform by legislative authority, relates to the uniformity of the "system", and not to the uniformity of the class or kind of the "schools"; and thus qualifying the word "system," it is sufficiently complied with where, by statute or authorized regulation of the public authorities, provision is made for establishment of schools of like kind throughout all sections of the State and available to all of the school population of the territories contributing to their support. Board of Educ. v. Board of County Comm'rs, 174 N.C. 469, 93 S.E. 1001 (1917).

This section contemplates that the General Assembly shall provide a State system of public schools to the end that every child, without regard to the county in which such child resides, shall have an opportunity to attend a school in which standards set up by the State are maintained and wherein tuition shall be free of charge. Marshburn v. Brown, 210 N.C. 331, 186 S.E. 265 (1936); Constantian v. Anson County, 244 N.C. 221, 93 S.E. 2d 163 (1956).

The provisions of this section and # 1 of this article are mandatory that the legislature provide by taxation and otherwise for a general and uniform system of public education, free of charge, to all of the children of the State and for the continuation of the school term in the various districts for at least six months (now nine months) in each and every year. Lacy v. Fidelity Bank, 183 N.C. 373, 111 S.E. 612 (1922). See Mebane Graded School Dist. v. County of Alamance, 211 N.C. 213, 189 S.E. 873 (1937). See also Collie v. Commissioners of Franklin County, 145 N.C. 170, 59 S.E. 44 (1907).

The provision of this section is mandatory and may not be disregarded either by the legislature or by officials charged with the duty of administering the law. Blue v. Durham Pub. School Dist., 95 F. Supp. 441 (M.D.N.C. 1951).

This section is mandatory, but the mode of performance is prescribed by statute. City of Hickory v. Catawba County, 206 N.C. 165, 173 S.E. 56 (1934).

It is the duty of the State to provide a general and uniform State system of public schools of at least six months (now nine months) in every year, wherein tuition shall be free of charge to all the children of the State. It is a necessary expense and a vote of the people is not required to make effective these and other constitutional provisions in relation to the public school system of the State. Metane Graded School Dist. v. County of Alamance, 211 N.C. 213, 189 S.E. 873 (1937). See also Fuller v. Lockhart, 209 N.C. 61, 182 S.E. 733 (1935).

Duty Is Imposed on General Assembly. - It is the province of the General Assembly, and not of the State Board of Education, to establish a uniform system of public schools. Board of Educ. v. State Bd. of Educ., 114 N.C. 313, 19 S.E. 277 (1894). See also Bridges c. City of Charlotte, 221 N.C. 472, 20 S.E. 2d 825 (1942).

The establishment and maintenance of a general and uniform system of public schools is upon and exclusively within the province of the General Assembly. Moore v. Board of Educ., 212 N.C. 499, 193 S.E. 732 (1937), and cases cited therein.

It is a legislative function to formulate the means of carrying out the provisions of this section. Wilkinson v. Board of Educ., 199 N.C. 669, 155 S.E. 562 (1930).

The establishment and operation of the public school system is under the control of the legislative branch of the government, subject only to pertinent constitutional provisions as to uniformity and length of term. Coggins v. Board of Educ., 223 N.C. 763, 28 S.E. 2d 527 (1944).

No Limitation on School Term. - The mandatory provision of this section to the effect that one or more public schools shall be maintained at least six months (now nine months) in every year, wherein tuition shall be free of charge to children of the State, is not a limitation as to the length of the school term; it is the minimum required by the Constitution. Harris v. Board of Comm'rs, 274 N.C. 343, 163 S.E. 2d 387 (1968).

This section having required a public school system of the State to have at least six-months (now nine-months) terms in each year, leaves it to the discretionary power of the legislature to fix terms in excess of that period. Frazier v. Board of Comm'rs, 194 N.C. 49, 138 S.E. 433 (1927).

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Section 3. School Attendance. The General Assembly shall provide that every child of appropriate age and of sufficient mental and physical ability shall attend the public schools, unless educated by other means.

APPENDIX B

ROBERT MORGAN
ATTORNEY GENERAL

State of North Carolina
Department of Justice
P O Box 629
Raleigh
27602

27 March 1973

'Ir. Fred W. Manley
Division of Research
State Department of
Public Instruction
506 Education Building
Raleigh, North Carolina 27602

Dear Mr. Manley:

I enjoyed very much meeting this morning with you and Ms. Jane Janey and discussing the prob'em areas affecting annual operation of our public schools.

I am in total agreement that the Department of Public Instruction should make an in depth study of the feasibility of having all public schools operate on an annual basis. I was delighted to hear that such a study is being seriously contemplated.

As I pointed out, I have doubts as to the authority of the State Board of Education, under the present statutory scheme set forth in Chapter 115, to mandate that all school administrative units operate on a twelve months schedule. I do not think that the State Board could presently require local school administrative units to so operate. Furthermore, the great bulk of our system of State financing of public schools is geared to nine months of operation rather than twelve.

It would be very helpful if you could study the systems and methods of those states which are presently operating their schools year-round. As you know, this would be a substantive change in direction of operation of the public schools

of North Carolina and would require careful planning. Furthermore, I would suggest that local superintendents be requested to participate in the grass roots planning of such a project. Upon reflection, perhaps it would be best to wait awhile until your own thoughts and research are better gelled before contacting the local superintendents.

As you get further along in your study, you will probably want to discuss statutory changes which would be necessary if you go to a twelve month operation. I will be happy to assist you or a member of your staff in making the necessary changes in the law to allow for the year-round operation of the public schools.

Very truly yours,

ROBERT MORGAN
Attorney General

Andrew A. Vanore, Jr.
Deputy Attorney General

AAVjr:wk